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DEPARTMENT OF THE INTERIOR
Hubert Work, Secretary

U. S. GEOLOGICAL SURVEY
George Otis Smith, Director

BULLETIN 766

SPIRIT LEVELING IN CALIFORNIA
1896–1923

POLITECHNIKA GDAŃSKA
ZAKŁAD GEOLOGII

C. H. BIRDSEYE
CHIEF TOPOGRAPHIC ENGINEER

POLITECHNIKA GDAŃSKA
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EXPLANATORY NOTE

The results of spirit leveling given in this bulletin are arranged by "degree quadrangles," each covering one degree of latitude and longitude, in geographic order beginning at the southeast corner of the State. A diagram showing the area included is given for each degree quadrangle. After the matter covering degree quadrangles 38°–39°, 122°–123°, and 38°–39°, 123°–124°, was printed large errors in the adjustment of the level lines were found which make further field work necessary to determine the proper correction. This matter, including Figures 41 and 42, has accordingly been omitted. At the end of the bulletin is given a list of approximate elevations obtained from various sources.

SPIRIT LEVELING IN CALIFORNIA, 1896-1923

C. H. Birdseye, Chief Topographic Engineer

POLITECHNIKA GDAŃSKA ZAKŁAD GEOLOGII

INTRODUCTION

Cooperation.—The State of California contributed financially to most of the level work done in Sacramento, Salinas, and San Joaquin valleys. Nearly all the expense of the United States Geological Survey's work done in 1922 and 1923 in Los Angeles County was borne by that county. The expense of the work done in other parts of the State was paid mainly from appropriations made for the United States Geological Survey, the United States Coast and Geodetic Survey, and the Corps of Engineers, United States Army.

Previous publications.—The results of spirit leveling done in California from 1896 to 1910 have been published by the United States Geological Survey in Bulletins 342 and 481, and these results and those of later work in the State are included in this report. The elevations given are reckoned from mean sea level and in general are in accord with the precise-level lines run by the United States Coast and Geodetic Survey.

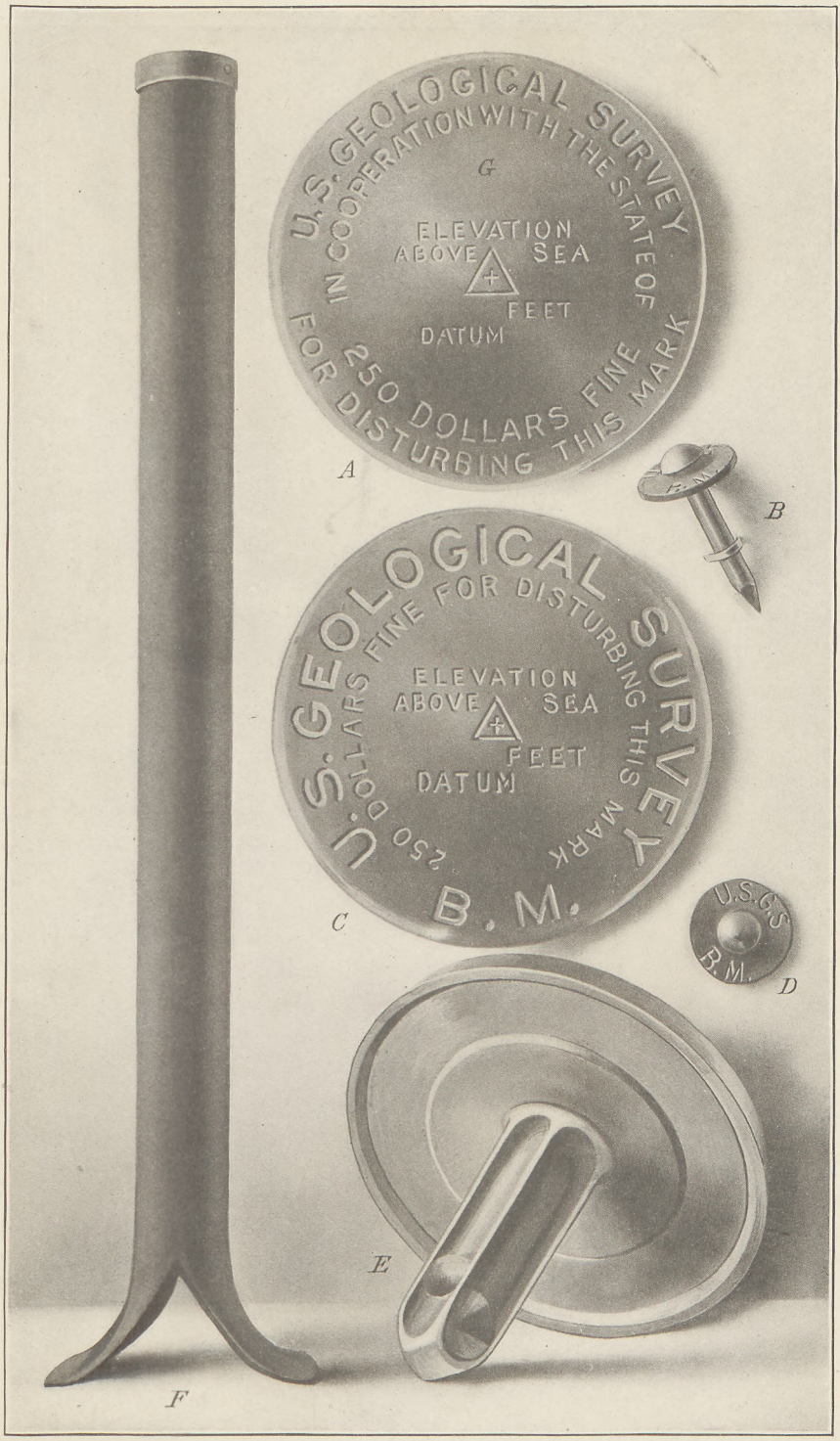
Personnel.—The field work was done by the engineers of the Geological Survey named in the bulletin in connection with the matter showing the elevations determined. The office work, which involves the adjustment of the field notes to the data on record in the Geological Survey, was done by D. H. Baldwin under the supervision of E. M. Douglas, topographic engineer. The matter was compiled for publication by S. S. Gannett, geographer.

Classification of elevations.—The elevations shown are classified as precise or primary, according to the methods employed in their determination. For precise lines instruments and rods of the highest grade are used, each line is run both forward and backward, and every precaution is taken to guard against error. The allowable divergence in feet between a line run forward and one run backward is represented by the formula $0.017\sqrt{D}$, in which D is the distance in miles between bench marks. For primary lines standard Y levels are used; lines are run in circuits or are closed on precise-level lines, with an allowable closing error in feet represented by the formula $0.05\sqrt{D}$, in which D is the length of the circuit in miles, the work being done with sufficient care to maintain this standard. For levels of both classes careful office adjustments are made, the small outstanding errors being distributed over the lines.

Bench marks.—The standard bench marks used by the United States Geological Survey prior to 1920 were of two forms. One, still in use, is a circular bronze or aluminum tablet (*C* and *E*, Pl. I), 3½ inches in diameter and one-quarter of an inch thick, having a 3-inch stem, which is cemented into a hole drilled in solid rock or in the wall of some public building, a bridge abutment, or other substantial masonry structure. The other form (*F*, Pl. I), which was used where masonry or rock was not available, consists of a hollow wrought-iron post 3½ inches in outer diameter and 4 feet in length, which was set about 3 feet in the ground. The bottom was spread out to a width of 10 inches in order to get a firm bearing. An aluminum-bronze cap was riveted upon the top of the post. A third style of bench mark with abbreviated lettering (*B* and *D*, Pl. I) is used for unimportant points. This consists of a special copper nail, 1½ inches long, driven into a wooden structure through a copper washer seven-eighths of an inch in diameter. The tablets as well as the caps on the iron posts and the washer are appropriately lettered, and cooperation with States is indicated (*G*, Pl. I). Since 1920 concrete posts having a bronze tablet in the top have been used instead of iron posts.

The numbers stamped on the bench marks described in the following pages represent the elevations to the nearest foot as determined by the levelman. These numbers are stamped with $\frac{3}{16}$-inch steel dies on the tablets or post caps, to the left of the word "feet." The office work, which includes the reduction of the elevations to mean sea level, may so change some of the figures that the markings stamped are 1 or 2 feet in error. It is assumed that engineers and others who have occasion to use the bench-mark elevations will apply to the Director of the United States Geological Survey, at Washington, D. C., for the adjusted elevations and will use the elevations marked only for identification. The present practice of the United States Geological Survey and the United States Coast and Geodetic Survey is to defer the stamping of elevations on bench marks until after the office adjustment has been completed. When the levelman establishes a bench mark he stamps on it a serial number, the year, and his initial letter, for identification only.

Datum.—All elevations determined by the United States Geological Survey and the United States Coast and Geodetic Survey are measured from mean sea level, which is the level the surface of the sea would assume if all disturbing influences of tide, current, and wind were removed. Mean sea level is thus the average of all the hourly heights of the tide; it differs somewhat from mean tide level, which is the average of the high and low water. It is determined from observations made by means of tidal gages placed at stations where the height of the water is not affected by local con-



GEOLOGICAL SURVEY BENCH MARKS

A, Tablet used in cooperating States. The State name is inserted at *G*
B and *D*, Copper temporary bench mark, consisting of a nail and copper washer
A, *C*, and *E*, Tablets for stone or concrete structures
F, Iron post used where there is no rock

TOPOGRAPHIC MAPS
of
SACRAMENTO AND SAN JOAQUIN VALLEYS
CALIFORNIA
ON
SCALE OF 1:31680
OR
2 INCHES = 1 MILE

SCALE OF THIS INSET
APPROXIMATELY 20 MILES
TO 1 INCH

TOPOGRAPHIC MAPS PUBLISHED

MAPS OF SAME REGION ON TWO SCALES
TWO-MILE SCALE (1:125000)
ONE-MILE SCALE (1:62500)

QUADRANGLES FOR WHICH NO MAPS ARE PUBLISHED

YOSEMITE
SACRAMENTO
(DUCOR)

LARGE SCALE MAPS FOR LOS ANGELES COUNTY COVER 6-MINUTE QUADRANGLES
SCALE 1:24,000

EXTRACT FROM U.S.G.S. BASE MAP

INDEX MAP OF CALIFORNIA SHOWING GEOGRAPHIC POSITIONS OF QUADRANGLES

Scale 1/2,500,000

APPROXIMATELY 40 MILES TO 1 INCH

25 0 25 50 75 100 MILES

A. HOEN & CO. BALTIMORE, MD.

POLITECHNIKA GDAŃSKA
ZAKŁAD GEOLOGII

ditions, such as are due to long narrow bays, rivers, and like features. To obtain even approximately correct results these observations must extend over at least one lunar month, and if great accuracy is desired they must extend over several years. At ocean stations the half-tide level and the mean sea level usually differ but little. It is assumed that there is no difference between the mean sea levels determined from observations made in the Atlantic Ocean, the Gulf of Mexico, and the Pacific Ocean.

The elevations shown on some bench marks that lie far from the sea have been determined not by means of lines run to them from sea level by Government engineers but by means of lines run by those engineers from inland datum points fixed by railroad, municipal, or other engineers. On such a bench mark the datum point used is indicated by letters or a word stamped after the word "datum," the meaning of which is shown in the text. The elevations thus provisionally adopted are corrected from time to time as the Government precise-level lines are extended.

Index map.—The accompanying index map of the State of California (Pl. II) shows the geographic positions and the relations of the quadrangles in which leveling work has been done. Maps of these quadrangles (except those whose names are inclosed in parentheses, which have not been mapped) may be purchased from the United States Geological Survey at 10 cents each. A discount of 40 per cent is allowed on an order amounting to $5 at the retail price.

DEGREE QUADRANGLE 32°–33°, 114°–115°

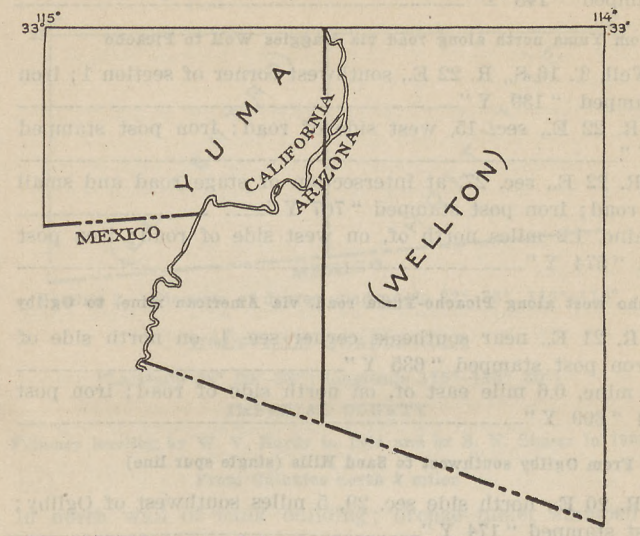


FIGURE 1.—Diagram of degree quadrangle 32°–33°, 114°–115°

POLITECHNIKA GDAŃSKA
ZAKŁAD GEOLOGII

WELLTON QUADRANGLE

[Latitude 32° 30′–33°; longitude 114°–114° 30′]

IMPERIAL COUNTY

Primary leveling by L. D. Ryus in 1903

From Pothole north to Castle Dome Landing

	Feet
Castle Dome Landing, 0.25 mile west of river, east side of road at foot of hill; iron post stamped "165 Y"	165.943

YUMA QUADRANGLE

[Latitude 32° 30′–33°; longitude 114° 30′–115°]

IMPERIAL COUNTY

Checked primary leveling by R. A. Farmer in 1903

From Drylyn southeast along Southern Pacific R. R. to Yuma

	Feet
Drylyn, 200 feet east of signboard, 8 feet east of milepost 708; iron post stamped "397 S B"	397.998
Cactus, 1,200 feet east of milepost 713, 4 feet west of signboard; iron post stamped "367 S B"	368.107
Ogilby, 300 feet west of section house, 6 feet east of milepost 715; iron post stamped "356 S B"	356.388
Knob, 200 feet west of station house; iron post stamped "294 S B"	294.741
Araz, 4 feet west of signboard; iron post stamped "156 S B"	157.126
Yuma, top of pier, north side of bridge over Colorado River; aluminum tablet stamped "137 S B"	138.100
Yuma, in front of passenger station; top of east rail	142.78

Primary leveling by C. J. Hoover, G. L. Gordon, and L. D. Ryus in 1902–3

From Yuma northeast along wagon road to Potholes

	Feet
Yuma, 12.72 miles northeast of, 10 feet west of Yuma and Potholes road, north side of point of hill, south side of Pothole Canyon; iron post stamped "148 Y"	149.051

From Yuma north along road via Maggies Well to Picacho

Maggies Well, T. 16 S., R. 22 E., southwest corner of section 1; iron post stamped "139 Y"	139.669
T. 15 S., R. 22 E., sec. 15, west side of road; iron post stamped "445 Y"	445.267
T. 14 S., R. 22 E., sec. 27, at intersection of stage road and small loop of road; iron post stamped "767 Y"	767.824
Picacho mine, 1.2 miles north of, on west side of road; iron post stamped "574 Y"	574.185

From Picacho west along Picacho-Yuma road, via American mine, to Ogilby

T. 15 S., R. 21 E., near southeast corner sec. 1, on north side of road; iron post stamped "635 Y"	636.051
American mine, 0.6 mile east of, on north side of road; iron post stamped "699 Y"	700.313

From Ogilby southwest to Sand Hills (single spur line)

T. 16 S., R. 20 E., north side sec. 29, 5 miles southwest of Ogilby; iron post stamped "174 Y"	174.682

From point 2 miles northeast of Ogilby north via Hedge's mine 10 miles (single spur line)

T. 14 S., R. 20 E., sec. 23, 4.3 miles north of Hedge's mine, 9.9 miles north of Ogilby; iron post stamped "697 Y"	698.233

From Araz southwest to Mexican boundary

Monument No. 207; base of masonry	155.96
Monument No. 207, on United States side; iron post stamped "155 Y"	156.024
Monument No. 206; base of masonry	119.37
Monument No. 206, in foundation, United States side; top of bolt	119.676

DEGREE QUADRANGLE 32°–33°, 115°–116°

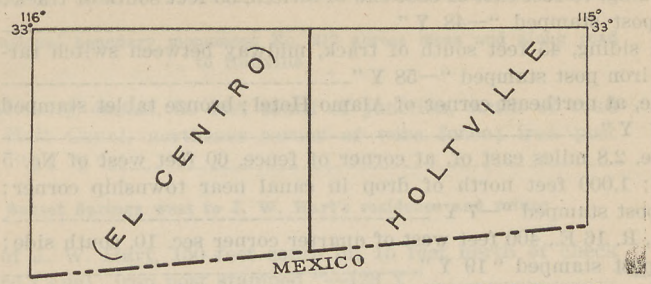


FIGURE 2.—Diagram of degree quadrangle 32°–33°, 115°–116°

HOLTVILLE QUADRANGLE

[Latitude 32° 30′–33°; longitude 115°–115° 30′]

IMPERIAL COUNTY

Primary leveling by W. V. Hardy in 1904 and by S. N. Stoner in 1905

From Calexico north 2 miles

	Feet
Calexico, in north wall of bank building; bronze tablet stamped "+ 5 Y"	5.644
Calexico, 2 miles north of, southwest corner of bridge over main canal; iron post stamped "+ 2 Y"	2.569

From international boundary monument No. 219 east to Holt Canal

Calexico, 10 miles east of, 100 feet north of Holt Canal, 70 feet south of Hemlock Canal, 45 feet north of telephone line; iron post stamped "35 Y." (Bench mark determined by a single unchecked line.)	35.887

From Calexico across country to international boundary monument No. 215

Calexico, 1.5 miles east of, 2 feet east of international boundary monument No. 220; iron post stamped "6 Y" (from report, 1.804)	6.998
Calexico, 3.6 miles east of, north of road, west end of bridge over main canal; iron post stamped "17 Y"	18.134
Calexico, 4.6 miles east of, international boundary monument No. 219; top of bolt in base of shaft, north side (from report, 19.652)	25.046
Calexico, 4.6 miles east of, 6 feet north of boundary monument No. 219; iron post stamped "26 Y"	26.942
Sharp triangulation station; iron post	60.693
Boundary monument No. 217; northeast corner of cement base (from report, 51.739)	55.782
Boundary monument No. 217, 9 feet north of; iron post stamped "56 Y"	56.878
Boundary monument No. 216, 1 mile west of; nail in top of 4 by 4 inch boundary stake	71.815
Boundary monument No. 215; northeast corner of cement base (from report, 93.144)	96.114

	Feet
Boundary monument No. 215, 6 feet north of; iron post stamped "96 Y"	97.113
From Cabaker Junction along Holtville Interurban R. R. to Holtville, thence along road 2.8 miles east, thence southeast to boundary monument No. 215	
Brice siding, 75 feet east of east end of switch, 35 feet south of track; iron post stamped "—48 Y"	[1] —47.419
Gleason siding, 45 feet south of track, midway between switch targets; iron post stamped "—58 Y"	—57.115
Holtville, at northeast corner of Alamo Hotel; bronze tablet stamped "—12 Y"	—9.114
Holtville, 2.8 miles east of, at corner of fence, 60 feet west of No. 5 canal; 1,000 feet north of drop in canal near township corner; iron post stamped "—7 Y"	—6.022
T. 16 S., R. 16 E., 400 feet west of quarter corner sec. 10, south side; iron post stamped "19 Y"	19.534
From international boundary monument No. 219 over mesa to wagon bridge over Alamitos Canal, thence along county road to Holtville	
Boundary monument No. 219, 6 feet north of; iron post stamped "26 Y"	26.942
Alamitos Canal, bridge near quarter corner between secs. 28 and 33, 10 feet east of northeast corner; iron post stamped "12 Y"	12.648
Holtville, 1 mile south of, at triangulation station; top of iron post stamped "6 Y"	6.581
From Sunset Springs across country and along road to Holtville	
Sunset Springs, 4.5 miles southwest of, west side of main canal No. 5, at north side of headgate to Oak Canal; iron post stamped "—53 Y"	—51.759
From Holtville east across country to point 2.5 miles east of Hardy triangulation station, thence to Sunset Springs	
Holtville, 6.1 miles east of, at old beach rim; iron post stamped "57 Y"	57.792
Holtville, 10 miles northeast of; iron post stamped "79 Y"	79.829
Holtville, 13 miles northeast of, east of low sand ridge; iron post stamped "112 Y"	112.834
Hardy triangulation station, 2.5 miles west of, on summit of hill; iron post stamped "140 Y"	140.913
Hardy triangulation station, 6 miles northwest of; iron post stamped "100 Y"	100.951
Sunset triangulation station, 4 miles east of, 1 mile northeast of Deer Park; iron post stamped "76 Y"	77.010
Sunset triangulation station, on summit; iron post stamped "97 Y"	97.875
Sunset Springs, 10 feet west of; iron post stamped "—44 Y"	—42.719
From international boundary monument No. 215 across country to point 2.5 miles west of Hardy triangulation station	
Boundary monument No. 215, 4.5 miles northeast of; iron post stamped "131 Y"	131.843
Boundary monument No. 215, 8 miles northeast of; iron post stamped "132 Y"	132.809

[1] Elevations having the minus sign are below sea level.

	Feet
Boundary monument No. 215, 11 miles northeast of; iron post stamped "128 Y"	128.796
Boundary monument No. 215, 14.3 miles northeast of, 0.75 mile south of Hardy triangulation station, west edge of sand; iron post stamped "132 Y"	132.714

From international boundary monument No. 217 across mesa and along road to Holtville

Holt and Hickory canals, 50 feet south of junction, south of road west of Holt Canal, northeast corner of wire fence; iron post stamped "14 Y"	15.216

From Sunset Springs west to J. W. Hart's residence and return

Residence of J. W. Hart, 150 feet south of, 15 feet north of check in Orchard Canal; iron post stamped "—123 Y"[2]	—121.705

EL CENTRO QUADRANGLE

[Latitude 32° 30′–33°; longitude 115° 30′–116°]

IMPERIAL COUNTY

Primary leveling by W. V. Hardy and S. N. Stoner in 1904 and 1905

From Brawley south to Imperial

	Feet
Brawley, 0.5 mile north of, 3 feet east of milepost 684; iron post stamped "—117 Y"	—117.186
Brawley station, 60 feet north of, at street crossing; top of rail	—112.102
Brawley triangulation station; iron post stamped "—93 Y"	—92.374
Brawley, 3.5 miles south of, 5 feet south of milepost 688, west of track; iron post stamped "—119 Y"	—118.248
Imperial, 5 miles north of, at southwest corner of fence; iron post stamped "—91 Y"	—90.175
Imperial, 3 miles north of, 30 feet north of wagon-road bridge over arroyo, west of road under second bank; iron post stamped "—88 Y"	—87.138
Imperial, south wall of Imperial Hotel; bronze tablet stamped "—61 Y"	—59.853
Imperial triangulation station, 2,000 feet north of railroad station, 40 feet south of spur, east of main track; iron post stamped "—66 Y"	—65.437

From Imperial 1.8 miles east to crossroads, thence south to Calexico

Imperial, 1.8 miles east of, in southeast angle of crossroads, 3 feet west of fence corner; iron post stamped "—67 Y"	—67.110
Holtville station, 60 feet south of, at Holtville Interurban R. R. crossing, west of road, 10 feet north of fence corner; iron post stamped "—50 Y"	—49.121
Holtville, 2.9 miles south of, 100 feet south of Southern Pacific R. R. crossing, east of road; iron post stamped "—22 Y"	—21.186
Heber siding, 2 feet east of crossing signboard; iron post stamped "—14 Y"	—13.049

[2] Elevations having the minus sign are below sea level.

From Calexico west to vicinity of international boundary monument No. 221	Feet
International boundary monument No. 221, northeast corner of iron base	4.252
International boundary monument No. 221, 0.6 mile west of; on north bank of Wisteria Canal; iron post stamped "4 Y"	4.859
From Brawley west to New River	
Brawley, 1.5 miles west of, 80 feet east of New River bridge, 30 feet south of road, 10 feet east of mesquite tree; iron post stamped "—133 Y"	[a] —132.206

[a] Elevations having the minus sign are below sea level.

DEGREE QUADRANGLE 32°–33°, 116°–117°

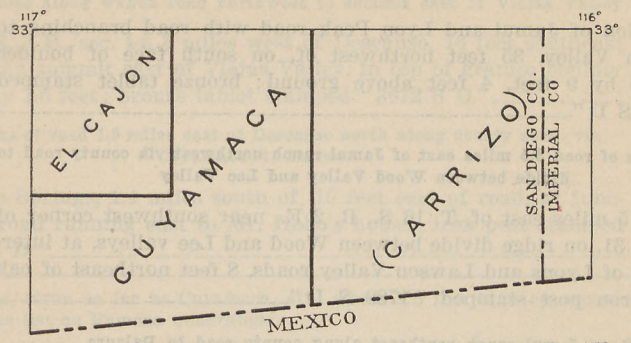


FIGURE 3.—Diagram of degree quadrangle 32°–33°, 116°–117°

CARRIZO QUADRANGLE

[Latitude 32° 30′–33°; longitude 116°–116° 30′]

SAN DIEGO AND IMPERIAL COUNTIES

Primary leveling by W. V. Hardy in 1902

At Campo

	Feet
Campo, 30 feet west of customhouse, 100 feet southeast of store, on vertical face of boulder 15 by 30 by 20 feet, 3 feet above ground; bronze tablet stamped "2543 S D"	2,543.511

CUYAMACA QUADRANGLE

[Latitude 32° 30′–33°; longitude 116° 30′–117°]

SAN DIEGO COUNTY

Primary leveling by W. V. Hardy in 1901–2 and by C. L. Nelson in 1902

From west line of Otay ranch northeast to Jamul ranch

	Feet
Lower Otay dam, 33 feet southeast of east end of, sec. 18, T. 18 S., R. 1 E., 70 feet east of intersection of filled road with dam, on northwest face of boulder 4 by 3 by 2 feet; bronze tablet stamped "486 S D"	486.569
T. 18 S., R. 1 E., sec. 4, 300 feet northwest of Jones's house, 50 feet northeast of intersection of roads, on top of boulder 3 by 3 by 1.5 feet; bronze tablet stamped "514 S D"	514.887

From Jamul ranch along county road north to Jamul post office, thence west to La Presa

Jamul, 231 feet northeast of schoolhouse, 3 feet east of southeast corner of Barrett's property, 25 feet northeast of intersection of roads, on top of boulder 2.5 by 2 by 1 foot; bronze tablet stamped "1040 S D"	1,040.274

	Feet
T. 16 S., R. 1 W., on San Bernardino meridian, 2 feet south of northeast corner sec. 36, 400 feet north of Sweetwater River, about 1 mile northeast of forks of road to La Presa and Jamul; iron post stamped "342 S D"	342.413
From Jamul ranch east along county road 3.5 miles to Lyon Peak road	
Intersection of Jamul and Lyon Peak road with road branching to Lawson Valley, 35 feet northwest of, on south face of boulder 9 by 9 by 9 feet, 4 feet above ground; bronze tablet stamped "1400 S D"	1,400.549
From forks of road 3.5 miles east of Jamul ranch northwest via county road to divide between Wood Valley and Lee Valley	
Jamul, 3.5 miles east of, T. 16 S., R. 2 E., near southwest corner of section 31, on ridge divide between Wood and Lee valleys, at intersection of Lyons and Lawson Valley roads, 8 feet northeast of oak tree; iron post stamped "1789 S D"	1,789.549
From Jamul ranch southeast along county road to Dalzura	
Dalzura schoolhouse, 120 feet south of, 6 feet north of creek ford, 6 feet north of road, on top of granite boulder; bronze tablet stamped "1243 S D"	1,243.680
From point east of Jamul ranch east along county road to Morena Dam, thence south to Campo	
Pine Valley station, 2.5 miles west of, sec. 5, T. 17 S., R. 3 E., 500 feet southeast of old adobe building, 15 feet north of road at summit, in top of granite boulder; bronze tablet stamped "2108 S D"	2,110.642
Morena dam, 0.4 mile north of, sec. 14, T. 17 S., R. 4 E., near quarter corner, 170 feet east of road; iron post stamped "3010 S D"	3,010.134
From Dalzura southeast along county road to Campo	
Eisenecke, sec. 8, T. 18 S., R. 3 E., 81 feet west of Barnight's house, 36 feet north of barn, 27 feet north of road, in granite boulder, 1 foot above ground; bronze tablet stamped "875 S D"	875.539
Potrero, 300 feet west of post office, sec. 18, T. 18 S., R. 4 E., at intersection of roads, 0.7 foot below top of boulder 4 feet high; iron post stamped "2323 S D"	2,323.478
T. 18 S., R. 4 E., sec. 24, at first crossing of Campo Creek, 200 feet west of ford, 50 feet south of road, 100 feet east of turn, on east face of boulder 6 by 5 by 8 feet; bronze tablet stamped "2189 S D"	2,189.483
From fork of road 2.5 miles northwest of Pine Valley station north along county road to Descanso, thence southeast via Pine Valley post office to Morena Dam	
Japatul schoolhouse, 12 feet southeast of, sec. 15, T. 16 S., R. 3 E., in top of granite boulder 2.5 by 2.5 by 2 feet; bronze tablet stamped "2866 S D"	2,866.166
Descanso, 1.5 miles east of, 2 feet south of signpost, on west side of road, at junction of road to Campo; iron post stamped "3541 S D"[1]	3,541.126

[1] No standard bench marks were left on remainder of this line.

From Pine Valley post office southwest along county road to Corte Madera

	Feet
Corte Madera ranch house, 85 feet north of, sec. 21, T. 16 S., R. 4 E., in top of granite boulder 6 by 6 by 1.5 feet; bronze tablet stamped "3965 S D"	3,965.135

From Descanso along wagon road northwest to summit east of Viejas Valley

T. 15 S., R. 3 E., sec. 14, 3 miles west of Descanso, 16 feet southeast of road on summit east of Viejas Valley, in top of granite boulder 3 by 3 by 1.5 feet; bronze tablet stamped "3672 S D"	3,672.448

From forks of road 1.5 miles east of Descanso north along county road, via Cuyamaca, to Julian [2]

Twin Pine Springs, 1.4 miles south of, 10 feet east of road, at junction of road running east to Mr. Hobb's house; iron post stamped "4132 S D"	4,132.421

[2] This line, rerun as far as Cuyamaca, still closes 1.6 feet high on accepted height of Julian in the list on Ramona quadrangle.

DEGREE QUADRANGLE 32°–33°, 117°–118°

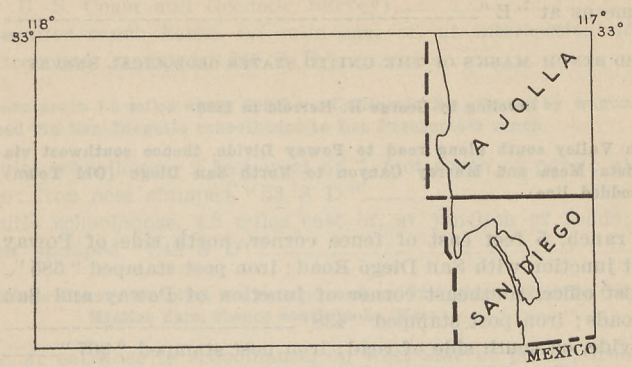


FIGURE 4.—Diagram of degree quadrangle 32°–33°, 117°–118°

LA JOLLA QUADRANGLE

[Latitude 32° 45′–33°; longitude 117°–117° 15′]

SAN DIEGO COUNTY

Precise leveling by the U. S. Coast and Geodetic Survey in 1906

North along Atchison, Topeka & Santa Fe Ry. in west part of quadrangle

	Feet
D, Old Town (San Diego), about 100 meters east of the Atchison, Topeka & Santa Fe Ry., set in hardpan, in the southwest corner of the public-school grounds; stone post 4 feet long by 6 inches square, projecting 6 inches above ground, with a hole cut in top 2.5 centimeters square and about 4 millimeters deep, bottom of which is bench mark (top of post lettered "U. S. B. M.")	25.436
E, about 1 mile north of Atwood, on the Atchison, Topeka & Santa Fe Ry. right of way, at west end of concrete culvert F 260, in center of horizontal surface; three-eighths inch copper bolt 2 inches long, set flush with surface	62.962
F, about 1.25 miles northwest of Ladrillo, 25 meters northwest of milepost 258, set in clay, in the corner of a fence, one-third of a meter east of the Atchison, Topeka & Santa Fe Ry. right of way; iron post, same as at "A," San Diego quadrangle	97.063
G, Selwyn, on the Atchison, Topeka & Santa Fe Ry. right of way, about 80 meters west of signboard "Selwyn," 16 meters north of track; stone post, same as at "D"	232.470
H, Sorrento, about 75 meters southwest of the Atchison, Topeka & Santa Fe Ry. station, in corner of fence, on land owned by John Works; stone post, same as at "D"	40.452
I, about 1 mile south of Del Mar, on the Atchison, Topeka & Santa Fe right of way, 1 meter south of second telegraph pole south of road crossing, 15 meters east of track and 3 meters above rail; iron post, same as at "A"	152.040

	Feet
I, Del Mar, on West Tenth Street, about 100 meters west of the Atchison, Topeka & Santa Fe Ry. right of way, on land owned by J. W. Bennett, on east face of old cement foundation, in center of vertical surface, three-fourths of a meter above ground; copper bolt, same as at "E"	90.577

STANDARD BENCH MARKS OF THE UNITED STATES GEOLOGICAL SURVEY

Leveling by George H. Herrold in 1898

From Green Valley south along road to Poway Divide, thence southwest via Linda Vista Mesa and Murray Canyon to North San Diego (Old Town) (double-rodded line)

Watson's ranch, 5 feet east of fence corner, north side of Poway Road, at junction with San Diego Road; iron post stamped "585"	585.941
Merton post office, southeast corner of junction of Poway and San Diego roads; iron post stamped "438"	438.890
Poway Divide, on south side of road; iron post stamped "967"	967.900
Virginia post office, 0.75 mile southwest of, in forks of road where road down valley leaves San Diego Road; iron post stamped "578"	578.897
Linda Vista Mesa, junction of Escondido and Linda Vista roads, 8.5 miles north of San Diego; iron post stamped "417"	417.393
Linda Vista Mesa, head of grade out of Mission Valley, on east side of Escondido Road and south end of mesa road; iron post stamped "394"	394.357
County Hospital, north of, west side of road to San Diego, 40 feet south of road to Old Town; iron post stamped "28"	28.378
Old Town (San Diego), south and east of motor track, in west wall at northwest corner of brick building, 2.6 feet above porch floor; copper bolt stamped "U. S. G. S. 44 ft. B. M."	44.335

Primary leveling by W. V. Hardy in 1901

From San Diego County Hospital along county road to Morena, thence along San Diego, Pacific Beach & La Jolla Ry. to race track, thence along Southern California Ry. to Sorrento

Moreno, in front of station; top of rail	15.6
Race Track, southwest corner of station; top of rail	21.0
American Park race track, 710 feet north of station, at southwest angle of junction of road to Pacific Beach; iron post stamped "25 S D" (recovered by U. S. Coast and Geodetic Survey)	25.449
Ladrillo, 2 miles north of, 600 feet west of G. N. Gilbert's ranch house, at junction of road to house with road from San Diego to Sorrento; iron post stamped "176 S D"	176.620
Selwyn, at signboard; top of rail	236.3
Linda Vista, 25 feet west of section house, 10 feet east of siding, in northwest corner of yard; iron post stamped "376 S D" (recovered by U. S. Coast and Goedetic Survey)	376.764

From Linda Vista east along wagon road to Virginia

Linda Vista, 2.4 miles east of, at northwest angle of intersection of roads; iron post stamped "452 S D"	452.945

From Sorrento east along county road to Merton

	Feet
Sorrento, in front of station; top of rail	31.8
Sorrento, 35 feet north of station, 15 feet northwest of section house, 25 feet east of road crossing; iron post stamped "31 S D" (recovered by U. S. Coast and Geodetic Survey)	31.640
Los Perasquitos ranch house, 0.7 mile east of, at intersection of roads; iron post stamped "245 S D"	245.763

From Sorrento north 1.5 miles along Southern California Ry., thence by wagon road via San Dieguito schoolhouse to Los Perasquitos ranch

San Dieguito schoolhouse, 2 feet west of, 1 foot south of porch, at entrance; iron post stamped "53 S D"	53.606
San Dieguito schoolhouse, 4.3 miles east of, at junction of roads; iron post stamped "348 S D"	348.742

From San Diego County Hospital via county road up San Diego River to Old Mission dam, thence south to La Mesa

Grantville, at entrance to schoolhouse, on west side of porch; iron post stamped "123 S D"	123.456
Old Mission dam, 125 feet southeast of, 100 feet south of San Diego River, 70 feet north of road, 35 feet east of windmill; iron post stamped "288 S D"	288.513
La Mesa Springs, at northeast corner of La Mesa Lemon Co.'s store, in brick front, 2.5 feet above porch floor; bronze tablet stamped "539 S D"	540.061

From La Mesa Springs west along county road, via San Diego Normal School, to San Diego

San Diego Normal School, at east side of main entrance, in south face of baluster, set flush with vertical surface 3 feet above ground; bronze tablet stamped "355 S D"	356.024

SAN DIEGO QUADRANGLE

[Latitude 32° 30′–32° 45′; longitude 117°–117° 15′]

SAN DIEGO COUNTY

Double-rodded line by Geo. H. Herrold in 1898

From quarantine station northeast to North San Diego (Old Town), thence south along Pacific Beach motor track to San Diego

	Feet
Quarantine station, north of, on Point Loma, U. S. Coast and Geodetic Survey bench mark, "Tidal 1," granite block 10 inches square on top, marked "U. S." (north side marked "Ref. Mark," east side marked "Coast Survey," south side marked "1853–54–55," west side marked "for tide," latest value)	8.724
Roseville, at southeast corner of fenced school grounds; iron post stamped "35" (recovered by U. S. Coast and Geodetic Survey)	35.302
San Diego County courthouse, in the foundation pier north of southeast corner of east wing, 4 feet above ground; bronze tablet stamped "42 S D"	42.353
San Diego, City bench mark, City Hall, Third and D Streets; north corner of stone steps (recovered by U. S. Coast and Geodetic Survey). (The elevation of this bench mark by the city datum is 40 feet)	46.131

	Feet
San Diego, Fourth and K Streets, in brick wall of west front of Creigne Building, 2 feet above step, north of door, old U. S. Coast and Geodetic Survey bench mark, Geological Survey elevation	12.20

Primary leveling by W. V. Hardy in 1901 and by C. L. Nelson in 1902

From San Diego Courthouse via National City & Otay Ry. to Otay

San Diego, intersection of Front Street and Southern California Ry. track; top of rail	8.0
San Diego, at crossing of National City & Otay and San Diego, Cuyamaca & Eastern railways; top of rail	9.7
National City, at intersection of National Avenue and First Street; top of rail	27.0
National City, at Twenty-fifth Street, 60 feet north of school, east of road; iron post stamped "57 S D"	57.832
Sweetwater Junction; top of rail	23.5
Chulavista, in front of station; top of rail	74.2
Otay, 1.5 miles south of schoolhouse, 1 foot east of porch, at east side of entrance; iron post stamped "62 S D"	62.572

From Sweetwater Junction via National City & Otay Ry. to La Presa, thence north to La Mesa

Bonita store, in front of platform; top of rail	60.3
Sweetwater schoolhouse, 85 feet northwest of, 25 feet south of road and 15 feet south-southeast of pepper tree; iron post stamped "65 S D"	65.554
Sunnyside, in front of station; top of rail	93.5
Aloha, in front of station; top of rail	152.2
La Presa, 1 mile southwest of, 130 feet northeast of signboard at intersection of roads; iron post stamped "238 S D"	238.566

From Otay along county road east to west line of Otay ranch

T. 18 S., R. 1 W., sec. 20, 3 feet north of east gate to Dr. Wiard's field, 2 feet east of west line of Otay ranch, 10 feet northwest of intersection of roads; iron post stamped "149 S D"	149.515

BENCH MARKS OF THE UNITED STATES COAST AND GEODETIC SURVEY

Near San Diego

San Diego, tidal 7, directly over tidal 6, in the surface of a cement collar or encasement built around the pile as a protection, toward the northwest corner of the collar; three-fourths inch hole 2 inches deep filled with babbitt metal (a rod held upon this point clears the north side of the pier)	1.959
San Diego, tidal 3, in the United States Quarantine Grounds, near the inner end of the pier and southwest of the blacksmith shop, at center of the top of a cement monument 1 foot square and 2 feet long, projecting 1 foot above the ground, resting upon a pier built of rock and cement upon the sand, 3 feet deep, 2.5 by 4 feet at the bottom, and 2 by 1.5 feet at the top; monument mark "U. S. C. S. 1906" and two diagonal lines, with a light dot at the center	6.168

	Feet
San Diego, tidal 2, near the northeast corner of the residence of the quarantine surgeon, on the cover of a sewer, in a granite slab 4 feet square, resting on a brick foundation and having an iron-covered manhole 2 feet in diameter in its center; drill hole filled with lead, 3½ inches from the edge of the iron cover and northwest of the center of the manhole	10.086
San Diego, tidal 5, in the United States Quarantine Grounds, near the southeast corner of the Cottage Hospital, on the cover of a sewer, a granite slab 4 feet square, cemented upon masonry and having an iron manhole 2 feet in diameter in its center; three-fourths inch hole 2 inches deep, filled with babbitt metal flush with the surface, 6.5 inches from the manhole, on the southeast corner	7.782
San Diego, tidal 4, outside the United States Quarantine Grounds, near the northwest corner, about 110 feet north of the fence; cement pier or monument similar to tidal 3 (the soil at the depth of 3 feet and for about a foot above is almost a hardpan)	12.487
San Diego, tidal 1, about 400 feet almost due north of the northwest corner of the United States Quarantine Grounds; center of the top of a granite block 10 inches square	8.724
A, about 1.25 miles north of Roseville, Point Loma, set in hardpan, at the inside corner of the public road leading from Roseville to Old Town, in range with the telephone poles and 1 meter south of the pole set in the corner; Coast Survey iron b. m. post	33.327
B, about 1⅔ miles north of San Diego, on the Atchison, Topeka & Santa Fe Ry. right of way, about 50 meters north of milepost 266, on west end of concrete culvert "C 266" in the corner of the horizontal surface, 2½ meters below the rail; Coast Survey b. m. tablet	20.630
C, San Diego, at southwest corner of Fir and California Streets, on the Atchison, Topeka & Santa Fe Ry. right of way, 3 meters west of track, on west side of iron rim to a manhole; surface within an outlined square 1 inch on each side	23.570

DEGREE QUADRANGLE 33°–34°, 114°–115°

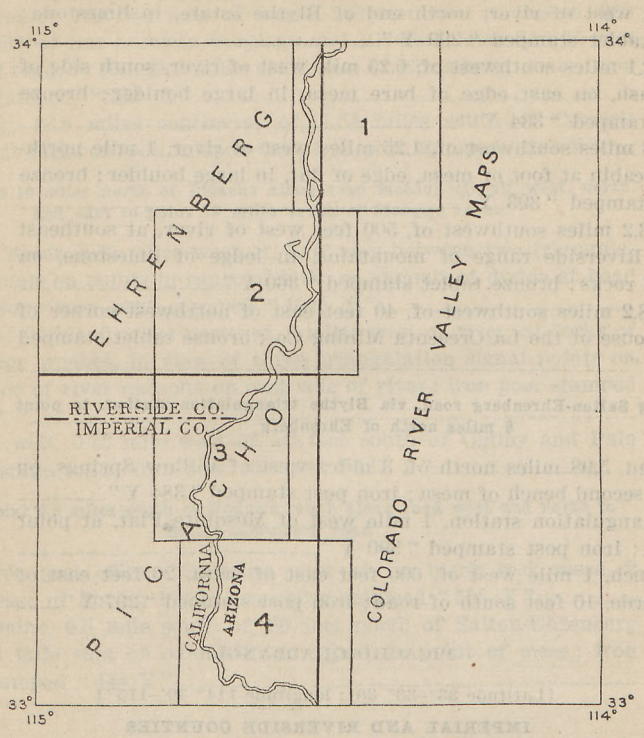


FIGURE 5.—Diagram of degree quadrangle 33°–34°, 114°–115°

EHRENBERG QUADRANGLE

[Latitude 33° 30′–34°; longitude 114° 30′–115°]

RIVERSIDE COUNTY

Primary leveling by E. W. Glafcke, G. L. Gordon, and L. D. Ryus in 1902–3

From Comer's ranch north along road on west side of river to Ehrenberg, Ariz.

	Feet
Ehrenberg, 8.5 miles southwest of, 1 mile west of river, 30 feet west of road, at site of abandoned ranch; iron post stamped "253 Y"	252.733
Ehrenberg, 4.5 miles southwest of, 1.5 miles west of river, 15 feet west of road, in valley of Blythe estate, 600 feet north of wash; iron post stamped "258 Y"	258.395
Parker, 48 miles southwest of, 0.5 mile north of ranch house at forks of road, opposite and 0.75 mile west of landing at Ehrenberg, in open flat, 30 feet west of road; iron post stamped "269 Y"	270.338

From point opposite Ehrenberg, Ariz., north along west side of river to La Cresenta Mining Co.'s house

	Feet
Parker, 41 miles southwest of, 0.35 mile west of river, between forks of road to Blythe ranch and Ehrenberg, in open flat; iron post stamped "285 Y"	286.283
Parker, 36 miles southwest of, at east end of Santa Maria Mountains, 300 feet west of river, north end of Blythe estate, in limestone; bronze tablet stamped "299 Y"	299.933
Parker, 32.1 miles southwest of, 0.25 mile west of river, south side of road wash, on east edge of bare mesa, in large boulder; bronze tablet stamped "334 Y"	334.817
Parker, 28 miles southwest of, 1.25 miles west of river, 1 mile northwest of cabin at foot of mesa, edge of flat, in large boulder; bronze tablet stamped "393 Y"	393.852
Parker, 23.2 miles southwest of, 500 feet west of river, at southeast end of Riverside range of mountains, in ledge of limestone, on point of rocks; bronze tablet stamped "360 Y"	361.093
Parker, 18.2 miles southwest of, 40 feet east of northwest corner of adobe house of the La Cresenta Mining Co.; bronze tablet stamped "364 Y"	364.320

North along Salton-Ehrenberg road, via Blythe triangulation station, to point 8 miles north of Ehrenberg

Salton road, 5.98 miles north of, 3 miles west of Willow Springs, on edge of second bench of mesa; iron post stamped "384 Y"	384.547
Blythe triangulation station, 1 mile west of Mesquite Flat, at point of mesa; iron post stamped "390 Y"	391.035
Blythe ranch, 1 mile west of, 600 feet east of mesa, 20 feet east of Palo Verde, 10 feet south of road; iron post stamped "297 Y"	297.776

PICACHO QUADRANGLE

[Latitude 33°–33° 30′; longitude 114° 30′–115°]

IMPERIAL AND RIVERSIDE COUNTIES

Primary leveling by E. W. Glafcke, G. L. Gordon, and L. D. Ryus in 1902–3

From Castle Dome landing northwest to Picacho

	Feet
Ferguson's old pumping plant, south side of hill at foot of bluff, 100 feet west of river bank; iron post stamped "177 Y"	177.239
Picacho cyanide plant, 1 mile northwest of, 0.5 mile north of schoolhouse, at point of hill west of road; iron post stamped "187 Y"	187.321

From Picacho northward along west side of Colorado River to Comer's ranch

Picacho, 8 miles north of, 33.90 miles south of Hodge's ranch, 20 feet east from road, in small saddle, 650 feet west of river, at upper end of large flat; iron post stamped "213 Y"	213.253
Hodge's ranch, 23.7 miles south of, 600 feet west of river, 150 feet east of cliffs, 50 feet west of road, north of clearing in open flat; iron post stamped "208 Y"	208.919
Hodge's ranch, 18.5 miles south of, 30 feet west of road, on point of mesa 250 feet west of river; iron post stamped "224 Y"	224.388
Hodge's ranch, 14.68 miles south of, 10 feet west of forks of road, 500 feet southwest of old pumping station, at 4 tanks formerly used by Paymaster mine; iron post stamped "229 Y"	229.761

	Feet
Hodge's ranch, 11.2 miles south of, 10 feet west of road, 750 feet north of Sobrino ranch, 200 feet due west of brush hut and corral; iron post stamped "232 Y"	232.536
Hodge's ranch, 3.5 miles southeast of, 25 feet east of road to Picacho, in small clearing in flat, 0.5 mile west of lagoon, 1 mile west of river; iron post stamped "227 Y"	227.374
Hodge's ranch, 100 feet west of house, 200 feet west of lagoon, 300 feet south of line between Santiago and Riverside counties, 15 feet west of road, in flat 19.7 miles southwest of Ehrenberg, Ariz.; iron post stamped "232 Y"	232.196
Ehrenberg, 13.8 miles southwest of, 1.54 miles south of Comer's ranch, at forks of road in open flat; iron post stamped "241 Y"	241.633
From point 10 miles north of Picacho along road making circuit west, north, and east to point 12 miles south of Hodge's ranch	
Colorado River, 5.42 miles west of, half way between two triangulation signals on points in range of hills, on summit of divide at head of canyon; iron post stamped "1045 Y"	1045.954
Summit of divide, 5 miles north of, 6 miles west of river, at forks of two large washes, in view of three triangulation signal points on west side of river and one on east side of river; iron post stamped "713 Y"	713.650
Eagle oil well, 0.75 mile west of, 20 feet south of Ogilby and Palo Verde stage road; iron post stamped "561 Y"	561.750
From point 2.5 miles south of Hodge's ranch along road west and north to Salton-Ehrenberg road	
Palo Verde post office, 6.24 miles west of, on black rock mesa, 2 miles east of Spring Peak; iron post stamped "583 Y"	583.887
Hodge's mine, 0.5 mile south of, 80 feet north of Salton-Ehrenberg road, 1 mile east of triangulation signal on point of mesa; iron post stamped "444 Y"	444.985

DEGREE QUADRANGLE 33°–34°, 115°–116°

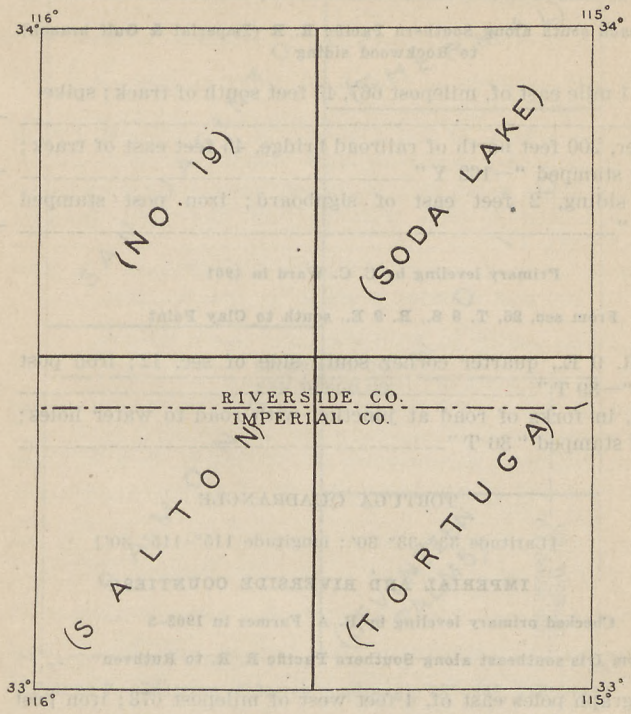


FIGURE 6.—Diagram of degree quadrangle 33°–34°, 115°–116°

SALTON QUADRANGLE [1]

[Latitude 33°–33° 30′; longitude 115° 30′–116°]

IMPERIAL AND RIVERSIDE COUNTIES

Checked primary leveling by R. A. Farmer in 1902–3

From Salton southeast along Southern Pacific R. R. to Old Beach

	Feet
Salton, 50 feet north of post office, 150 feet south of station, on railroad right of way line; iron post stamped "—257 SB"	[2]—256.537
Durmid, in northeast corner of section-house grounds; iron post stamped "—248 SB"	—247.060
Bertram, 50 feet south of railroad, 10 feet east of northeast corner of station; iron post stamped "—249 SB"	—247.796
Frink, 50 feet south of station, 6 feet east of milepost; iron post stamped "—258 SB"	—257.703

[1] For additional elevations on this quadrangle refer to Farmer's double primary line, Colton to Yuma, along Southern Pacific R. R.

[2] Elevations having the minus sign are below sea level.

	Feet
Volcano, in northeast corner of section-house grounds; iron post stamped "—221 SB"	[3]—220.899
Old Beach, at west end of switch, 8 feet east of milepost 666; iron post stamped "—124 SB"	—122.899

Primary leveling by W. V. Hardy in 1904 and by S. N. Stoner in 1905

From Old Beach south along Southern Pacific R. R (Imperial & Gulf branch) to Rockwood siding

Old Beach, 1 mile east of, milepost 667, 45 feet south of track; spike in base	—104.360
Alamo River, 200 feet north of railroad bridge, 45 feet east of track; iron post stamped "—162 Y"	—161.263
Rockwood siding, 2 feet east of signboard; iron post stamped "—157 Y"	—156.583

Primary leveling by C. C. Ward in 1901

From sec. 26, T. 9 S., R. 9 E., south to Clay Point

T. 10 S., R. 9 E., quarter corner south side of sec. 12; iron post stamped "—39 T"	—38.128
Clay Point, in forks of road at junction with road to water holes; iron post stamped "36 T"	36.846

TORTUGA QUADRANGLE

[Latitude 33°–33° 30′; longitude 115°–115° 30′]

IMPERIAL AND RIVERSIDE COUNTIES

Checked primary leveling by R. A. Farmer in 1902–3

From Iris southeast along Southern Pacific R. R. to Ruthven

	Feet
Iris, 5 telegraph poles east of, 4 feet west of milepost 673; iron post stamped "77 SB"	77.257
Tortuga, 100 feet west of signboard, 4 feet east of milepost 677; iron post stamped "186 S B"	186.930
Milepost 680, 1,100 feet east of, 20 feet north of warning board at crossing; iron post stamped "220 SB"	220.800
Mammoth, 400 feet west of station, 50 feet south of railroad track; iron post stamped "259 S B"	259.610
Acolita, 50 feet south of track, 10 feet east of milepost 689; iron post stamped "271 S B"	271.376
Mesquite, 400 feet east of signboard at milepost 694; iron post stamped "295 S B"	295.249
Glamis, 1,800 feet east of station, 8 feet east of milepost 697; iron post stamped "338 S B"	338.690
Ruthven, 3 miles east of, east end of switch, 9 feet east of milepost 702; iron post stamped "379 S B"	379.380

[3] Elevations having the minus sign are below sea level.

DEGREE QUADRANGLE 33°–34°, 116°–117°

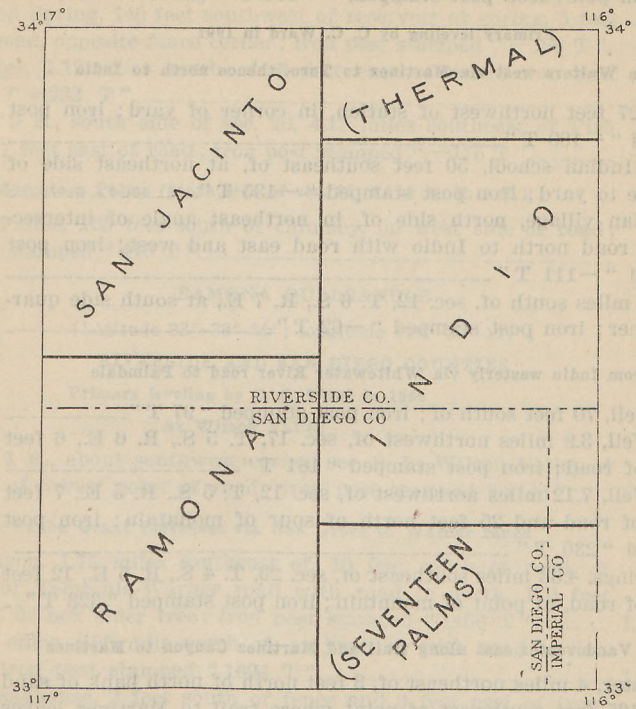


FIGURE 7.—Diagram of degree quadrangle 33°–34°, 116°–117°

INDIO SPECIAL QUADRANGLE

[Latitude 33° 15′–33° 50′; longitude 116°–116° 30′]

IMPERIAL, RIVERSIDE, AND SAN DIEGO COUNTIES

Checked primary leveling by R. A. Farmer in 1902–3

From Rimlon southeast along Southern Pacific R. R. to Mortmere

	feet
Rimlon, 0.16 mile southeast of signboard at section house, 45 feet southwest of track, near milepost 596; iron post stamped "342 T"	343.010
Dry Camp, 45 feet southwest of track, 90 feet west of switch at northwest end of siding; iron post stamped "164 T"	164.830
Myoma siding, 100 feet west of, at west end of switch, 45 feet southwest of track; iron post stamped "70 T"	70.861
Indio, in southeast corner of school yard; iron post stamped "—15 T"	[1]—14.145
Woodspur, 50 feet southwest of track, at road crossing; iron post stamped "—66 T"	—65.344
Thermal, 300 feet northwest of signboard, 45 feet southwest of track, 5 feet northwest of telegraph pole; iron post stamped "—121 T"	—120.087

[1] Elevations having the minus sign are below sea level.

	Feet
Walters, 27 feet northwest of station, in corner of yard; iron post stamped "—189 T"	—188.341
Mortmere, 100 feet southeast of switch stand at west end of siding, 45 feet south of track, 4 feet south of wagon road, 4 feet west of telegraph pole; iron post stamped, "—248 T" (under water)	—247.280

Primary leveling by C. C. Ward in 1901

From Walters west via Martinez to Toro, thence north to Indio

Walters, 27 feet northwest of station, in corner of yard; iron post stamped "—189 T"	—188.341
Martinez Indian school, 50 feet southeast of, at northeast side of entrance to yard; iron post stamped "—135 T"	—134.114
Toro Indian village, north side of, in northeast angle of intersection of road north to Indio with road east and west; iron post stamped "—111 T"	—110.122
Indio, 4.7 miles south of, sec. 12, T. 6 S., R. 7 E., at south side quarter corner; iron post stamped "—62 T"	—61.125

From Indio westerly via Whitewater River road to Palmdale

Indian Well, 70 feet south of; iron post stamped "97 T"	97.744
Indian Well, 3.9 miles northwest of, sec. 17, T. 5 S., R. 6 E., 6 feet south of road; iron post stamped "181 T"	181.549
Indian Well, 7.12 miles northwest of, sec. 12, T. 5 S., R. 5 E., 7 feet north of road and 25 feet north of spur of mountain; iron post stamped "230 T"	230.757
Palm Springs, 4.33 miles southeast of, sec. 29, T. 4 S., R. 5 E., 12 feet south of road, at point of mountain; iron post stamped "323 T"	323.654

From Vandeventer east along trail and Martinez Canyon to Martinez

Vandeventer, 4 miles northeast of, 3 feet north of north bank of sand wash, 165 feet southwest of point where trail to Martinez leaves wash, in face of white ledge 2.5 by 3 by 2.5 feet; bronze tablet stamped "3871 T"	3,871.854
Deep Canyon, 40 feet west of edge of west bluff, 15 feet north of trail, in top of granite boulder 4.5 by 5 by 3 feet; bronze tablet stamped "3492 T"	3,492.906
Summit of divide between Deep and Martinez canyons, on west slope of Martinez Mountain, 25 feet northeast of trail, in southeast face of granite boulder 4 by 5 by 6 feet; bronze tablet stamped "5168 T"	5,168.832
Agua Alta Spring, 235 feet southwest of, on northeast side of trail, 70 feet northwest of sand wash, on northwest side of granite boulder 3.5 by 5 by 6 feet; bronze tablet stamped "4282 T"	4,282.623
Martinez Canyon, south side of, opposite mouth of Tahquitz Canyon, 420 feet from foot of steep side of trail, in top of flat granite boulder 2 by 8 by 9 feet; bronze tablet stamped "2537 T"	2,537.378
Martinez Canyon, 270 feet below junction with Black Canyon, in face of granite cliff on south side of wash; bronze tablet stamped "1584 T"	1,584.808
Martinez Canyon, north side of, at mouth, 5 miles southwest of Martinez Indian school, in face of granite cliff, 4 feet above ground; bronze tablet stamped "655 T"	655.841

[2] Elevations having the minus sign are below sea level.

From Walters south along road to south side of sec. 26, T. 9 S., R. 9 E.

	Feet
Alamo Bonito, south side of, near water hole, in triangle between roads; iron post stamped "— T"[3]	—185.201
Agua Dulce, at north end of Indian village, 300 feet south of spring and garden, in road forks; iron post stamped "—183 T"	—182.286
Figtree John Spring, 140 feet southwest of reservoir at spring, 5 feet west of road, opposite fence corner; iron post stamped "—196 T"	—196.250
Fish Springs, 1.12 miles south of, 6 feet east of road; iron post stamped "—233 T"	—232.178
T. 9 S., R. 9 E., south side of sec. 26, 4.12 miles southeast of Fish Springs, 7 feet east of road; iron post stamped "—175 T"	—174.116

At Seventeen Palms (south side of sec. 35, T. 10 S., R. 8 E.)

Seventeen Palms, 165 feet south of chimney, on west side of road; iron post stamped "410 T"	410.828

RAMONA QUADRANGLE

[Latitude 33°–33° 30′; longitude 116° 30′–117°]

RIVERSIDE AND SAN DIEGO COUNTIES

Primary leveling by C. C. Ward in 1900

At Wilson Valley

	Feet
T. 8 S., R. 1 E., about southwest corner sec. 2, in Wilson Valley, 4 feet east of lowest point of road; iron post stamped "2146"	2,146.866

From Pauba Grant southeast via Oak Grove to Warner ranch

Nigger Canyon, 1.75 miles southeast of, 10 feet south of road, at junction of Temecula-Warner road with road to north, 120 feet southwest of box elder tree; iron post stamped "1450 T"	1,450.683
Radec post office, 0.25 mile north of, at junction with road to San Jacinto; iron post stamped "1694 T"	1,694.668
Cienega schoolhouse, 2 feet south of fence and 3 feet east of front gate; iron post stamped "1988 T"	1,988.615
Cienega schoolhouse, 2.75 miles southeast of, in flat draw, 10 feet north of road; iron post stamped "2439 T"	2,439.679
Oak Grove schoolhouse, 50 feet south of, in yard, at east side of gate; iron post stamped "2751 T"	2,751.637
Oak Grove schoolhouse, 4 miles southeast of, sec. 35, T. 9 S., R. 2 E., about 400 feet west of quarter corner, 10 feet west of road on summit of divide between Temecula and San Luis Rey rivers, 3 feet east of fence corner; iron post stamped "3282 T"	3,282.746
Puerta Cruz, 0.5 mile northeast of, 25 feet south of road; iron post stamped "2916 T"	2,916.746
Warner's ranch, 0.5 mile northeast of Adobe Cabin corral, north side of Agua Caliente Creek bed, in southeast corner of intersection of road from ranch house to corral with Temecula-Julian road; iron post stamped "2772 T"	2,772.733

From Warner's ranch west via San Luis Rey Canyon and Potrero Indian Reservation to Pauma Grant

San Luis Rey Canyon, head of, 45 feet west of road, above foot of grade in first bend of Smith Mountain; iron post stamped "2724 T"	2,724.628

[3] Elevations having the minus sign are below sea level.

	Feet
Amago post office, 3.33 miles southeast of, at east side of trail in San Luis Rey Canyon, south side of creek, 100 feet west of junction of dry creek bed from south with San Luis Rey River, on west side of granite ledge; bronze tablet stamped "2404 T"	2,404.694
La Jolla, at southwest corner of, Indian reservation schoolhouse; iron post stamped "2719 T"	2,719.777
Sparkman's store, 45 feet northwest of, 2 feet northeast of stone fence on southwest side of road; iron post stamped "1016 T"	1,016.622
From Sparkman's store south via Rincon to T. 11 S., R. 1 W.	
Rincon schoolhouse, 1.87 miles south of, 0.5 mile south of San Luis Rey River crossing, at junction of road to Escondido with road up creek; iron post stamped "939 T"	939.583
From Adobe Cabin corral on Warner's ranch east to Agua Caliente, thence southeast to point 1 mile east of Warner schoolhouse, thence northwest to Adobe Cabin corral	
Agua Caliente schoolhouse, southwest corner of; iron post stamped "3165 T"	3,165.634
Warner schoolhouse, 3.25 miles north of, T. 10 S., R. 3 E., 150 feet east of road and 5 feet east of southwest corner of building; iron post stamped "3459 T"	3,459.682
Warner schoolhouse, 1 mile east of, 50 feet east of junction of old Fort Yuma road with road to east; iron post stamped "3240 T"	3,240.601
Warner ranch house, in forks of road at southwest corner of; iron post stamped "2894 T"	2,894.681
From head of San Luis Rey Canyon southeast to Santa Ysabel, thence west via Ramona to San Pasqual	
Mesa Grande road, 400 feet southwest of end of lane; iron post stamped "2719 T"	2,719.614
T. 11 S., R. 3 E., north side of sec. 32, Santa Ysabel ranch boundary line, 5 feet south of intersection with section line; iron post stamped "3015 T"	3,015.636
Balcon Canyon, in forks of road; iron post stamped "3123 T"	3,123.792
Santa Ysabel, 180 feet west of road junction and south side of road; iron post stamped "2983 T"	2,983.684
Santa Ysabel schoolhouse, in yard at north side of gate; iron post stamped "2764 T"	2,764.738
Ballena schoolhouse, 60 feet south of, in yard at east side of gate; iron post stamped "2470 T"	2,470.640
Mesa Grande, in forks of road; iron post stamped "1776 T"	1,776.729
Ramona town hall, east side of, 0.5 foot above step; aluminum tablet stamped "1440 T"	1,440.697
Pamo grade, 0.2 mile south of forks of road, west of road, in turntable; iron post stamped "789 T"	789.624
East San Pasqual, 1 mile east of, 95 feet north of schoolhouse, in yard, 3 feet from fence at west side of gate; iron post stamped "410 T"	410.636
From junction of road 3 miles east of Ramona north to Spring Hill schoolhouse	
T. 12 S., R. 2 E., sec. 32, Spring Hill schoolhouse, 55 feet west of, in yard at south side of gate; iron post stamped "2340 T"	2,340.666

From San Ysabel east to Julian, thence north to Oberlin schoolhouse

	Feet
Wynola, at northeast corner of road intersection; iron post stamped "3654 T"	3,654.600
Julian, 1.75 miles west of, at southwest corner of junction of main road with private road to south; iron post stamped "3948 T"	3,948.690
Julian high-school building, in yard at north side of gate; iron post stamped "4219 T"	4,219.765
Oberlin schoolhouse, in yard at north side of gate; iron post stamped "4132 T"	4,132.471

SAN JACINTO QUADRANGLE

[Latitude 33° 30′–34°; longitude 116° 30′–117°]

RIVERSIDE COUNTY

Checked primary leveling by R. A. Farmer in 1902

East along Southern Pacific R. R. from Beaumont to Palm Springs

	Feet
Beaumont, Gray's brick store and warehouse, in front wall at northwest corner; bronze tablet stamped "2575 S B"	2,576.109
Banning, opposite Hotel Banning, in east wall of Frayer brick block; bronze tablet stamped "2330 S B"	2,330.716
Cabezon, 7 feet east of southeast corner of section-house grounds, north of track, in corner of stone-bordered walk; iron post stamped "1791 S B"	1,791.779
T. 3 S., between Rs. 2 and 3 E., east of road crossing, on north side of Southern Pacific Co.'s right of way; iron post stamped "1442 S B"	1,442.784
Whitewater siding, south of track, at northeast corner of section-house grounds; iron post stamped "1130 S B"	1,130.833
Palm Springs, 170 feet east of station, at east end of row of palm trees, 13 feet south of track; iron post stamped "685 T"	686.255
Palm Springs, 3.5 miles southeast of, 45 feet west of track, 4 feet northwest of milepost 592; iron post stamped "539 T"	540.253

Primary leveling by Geo. H. Herrold in 1897–8

From San Jacinto south along Southern California Ry. to Hemet[1]

San Jacinto, north side of east entrance of public-school building; bronze tablet stamped "1562"	1,562.613
Hemet grammar school, in brick column on north side of steps; bronze tablet stamped "1591" (moved, 1915)	1,591.977

From Hemet southeast along road to Kenworthy

Vallevista, southwest corner of school grounds; iron post stamped "1765"	1,765.967
T. 5 S., R. 2 E., sec. 18, range line on west side of section, top of knoll 20 feet south of road and east of bridge; iron post stamped "2062"	2,062.871
T. 5 S., R. 2 E., sec. 27, near mouth of Strawberry Creek, 125 feet from east side of road, in granite boulder; copper bolt stamped "2932"	2,932.832

[1] For additional elevations on this quadrangle refer to Farmer's double-primary line, Colton to Yuma, along Southern Pacific R. R.

	Feet
T. 5 S., R. 2 E., sec. 25, near mouth of Johnson Creek, 170 feet north of bridge, east side of road, inside of angle in fence; iron post stamped "4443"	4,443.902
T. 5 S., R. 3 E., sec. 31, divide of Hemet Valley and San Jacinto drainage, 20 feet north of road; iron post stamped "4936"	4,936.865
T. 6 S., R. 3 E., sec. 10, Thomas's ranch, opposite and north of house, west of road at fence corner, on line between secs. 3 and 10; iron post stamped "4394"	4,394.818
T. 6 S., R. 3 E., sec. 25, Thomas's ranch, 10 feet east of south gate, where road forks to Kenworthy and Coahuila Valley; iron post stamped "4509"	4,509.851
From Kenworthy southwest along road to Wilson Valley	
Coahuila divide, 18 feet west of road; iron post stamped "4965"	4,966.088
T. 7 S., R. 3 E., sec. 21, Mission Indian Reservation, 20 feet west of north gate, on north side of road; iron post stamped "3836"	3,836.848
Coahuila Indian School, sec. 23, T. 7 S., R. 2 E., 3 feet north of southwest corner of chapel yard; iron post stamped "3635"	3,635.796
T. 8 S., R. 2 E., sec. 5, divide between Coahuila and Wilson valleys, 7 feet southeast of road; iron post stamped "3542"	3,543.157
From Wilson Valley north along road via Sage to Hemet	
T. 7 S., R. 1 E., sec. 20, Lewis Valley, east of road, 18 feet north of line fence between secs. 20 and 29; iron post stamped "2130"	2,131.060
Sage post office, east of, sec. 12, T. 7 S., R. 1 W., on east side of Coahuila road; iron post stamped "2283"	2,283.979
T. 6 S., R. 1 W., sec. 36, Sage divide, 10 feet east of road, 260 paces south of Hemet road; iron post stamped "2615"	2,615.955
T. 6 S., R. 1 W., sec. 4, Diamanta schoolhouse, in Diamond Valley, 0.5 mile west of county road, 20 feet east of entrance to building, in edge of lawn; iron post stamped "1626"	1,626.998
From point 3 miles east of Beaumont north to southwest corner of San Bernardino Forest Reserve (double-rodded line)	
Tps. 2 and 3 S., Rs. 1 E. and 1 W., common corner, at southwest corner of San Bernardino Forest Reserve, 1.5 miles north of railroad, 2 feet south of Forest Reserve monument, which is an iron pipe filled with concrete on San Bernardino meridian; iron post stamped "2710"	2,710.800
From point 3 miles east of Banning north to township and range line corner (double-rodded line)	
Tps. 2 and 3 S., Rs. 1 and 2 E., common corner, on south line of San Bernardino Forest Reserve, 1.25 miles north of Southern Pacific R. R., in top of square iron post filled with concrete; copper bolt stamped "2342"	2,342.334
From point 3.6 miles east of Cabezon north to township and range line corner (double-rodded line)	
Tps. 2 and 3 S., Rs. 2 and 3 E., common corner, 2 feet north of south line of San Bernardino Forest Reserve, 1.7 miles north of Southern Pacific R. R.; iron post stamped "1978"	1,978.663

From Whitewater southeast along road to Palm Springs, thence south up Palm Canyon trail to Vandeventer, thence northwest to Kenworthy

	Feet
T. 3 S., R. 4 E., sec. 29, 2.5 miles southeast of trestle 584 F, 25 feet east of rocky point, 5 feet south of Rubble canal from Whitewater River to Palm Springs; iron post stamped "828"	828.781
Palm Springs, in south concrete wall of hotel building; bronze tablet stamped "455"	455.933
Garden of Eden, on township line between Tps. 4 and 5 S., R. 4 E., east of Palm Canyon road; iron post stamped "557"	557.978
Garden of Eden, 3 miles south of, east side of Palm Canyon, in a grove of palms on southwest side of small canyon, at side of trail; iron post stamped "1000"	1,000.820
Garden of Eden, 10 miles south of, in Palm Canyon, near rocky gorge, by west wall of canyon, 100 feet southwest of creek crossing, where trail leaves the main canyon and crosses hills to the east; iron post stamped "3000"	3,000.132
Vandeventer, north of house on a little knoll, in a granite boulder 3 feet high, 8 by 4 feet, 50 feet east of road to house just south of where it forks to Kenworthy; copper bolt stamped "4549"	4,549.746
Kenworthy, south of post office, in a granite boulder 3 feet high, 7 by 5 feet, at rocky point 100 feet north of wash, by trail; bolt stamped "4566"	4,566.591

SEVENTEEN PALMS QUADRANGLE

[Latitude 33°–33° 15′; longitude 116°–116° 30′]

IMPERIAL AND SAN DIEGO COUNTIES

Primary leveling by C. C. Ward in 1901

From Seventeen Palms southwest along trail to Borego Springs

	Feet
T. 11 S., R. 9 E., southeast corner of sec. 4; iron post stamped "71 T"	71.904

From Seventeen Palms southwest along trail to Borego Springs

Seventeen Palms, 3.2 miles southwest of, 8 feet east of road; iron post stamped "367 T"	367.889
T. 11 S., R. 7 E., northeast corner of sec. 24; iron post stamped "336 T"	336.779
Borego Springs, 60 feet south of, 25 feet north of cabin; iron post stamped "452 T"	452.906

DEGREE QUADRANGLE 33°–34°, 117°–118°

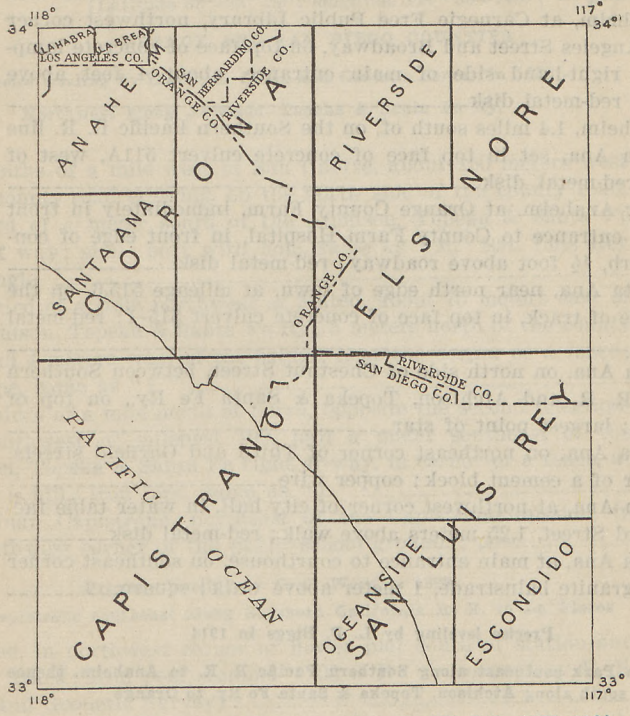


FIGURE 8.—Diagram of degree quadrangle 33°–34°, 117°–118°

ANAHEIM QUADRANGLE

[Latitude 33° 45′–34°; longitude 117° 45′–118°]

ORANGE AND LOS ANGELES COUNTIES

Precise leveling by the U. S. Coast and Geodetic Survey in 1920

From Downey quadrangle southeast along Southern Pacific R. R. across southwest part of quadrangle to Santa Ana

	Feet
U–33, Buena Park, 150 feet northeast of station, at southwest corner of new building occupied by drug store, in concrete sidewalk; Geological Survey bronze tablet stamped "76 1914 64"	75.672
V–33, Buena Park, 0.4 mile southeast of, on west side of track, in top face of concrete railway culvert 504F; red-metal disk	79.071
W–33, milepost 508, opposite, in top face of concrete culvert 507D, west of track; red-metal disk	127.040

	Feet
X–33, West Anaheim station, opposite and about 200 feet south of, immediately north of large water tank, in concrete pier of old destroyer tank, the top end of old broken bolt set in concrete pier protruding half an inch out of concrete, pier projecting 1 foot out of ground	138.464
Y–33, Anaheim, at Municipal Waterworks, about 150 meters south of station, on Los Angeles Street, in north concrete pier of large concrete water tank, 4 feet above ground; Geological Survey bronze tablet stamped "158 1914 65"	158.520
Z–33, Anaheim, at Carnegie Free Public Library, northwest corner of Los Angeles Street and Broadway, on top face of concrete lamppost at right-hand side of main entrance, about 4 feet above ground; red-metal disk	160.443
A–34, Anaheim, 1.4 miles south of, on the Southern Pacific R. R. line to Santa Ana, set in top face of concrete culvert 511A, west of track; red-metal disk	157.949
B–34, near Anaheim, at Orange County Farm, immediately in front of main entrance to County Farm Hospital, in front edge of concrete curb, ½ foot above roadway; red-metal disk	134.691
C–34, Santa Ana, near north edge of town, at mileage 515.6, on the west side of track, in top face of concrete culvert 515–I; red-metal disk	148.054
F–1, Santa Ana, on north side of Chestnut Street, between Southern Pacific R. R. and Atchison, Topeka & Santa Fe Ry., on top of hydrant; largest point of star	124.659
City, Santa Ana, on northeast corner of Third and Garfield streets, in center of a cement block; copper wire	128.166
G–1, Santa Ana, at northwest corner of city hall, in water table facing Third Street, 1.25 meters above walk; red-metal disk	124.288
H–1, Santa Ana, at main entrance to courthouse, on southeast corner of east granite balustrade, 1 meter above walk; square	133.409

Precise leveling by L. F. Biggs in 1914

From Buena Park southeast along Southern Pacific R. R. to Anaheim, thence south along Atchison, Topeka & Santa Fe Ry. to Orange

Buena Park, 150 feet northeast of depot, at southwest corner of new post-office building, in concrete sidewalk; bronze tablet stamped "76 1914 64"	75.672
Almon, 0.2 mile southeast of, on north end of concrete culvert 505–B; chiseled cross, marked "U.S.B.M."	93.28
Brookhurst, 60 feet south of station, in base of road-crossing signboard; spike, scribed "U.S.B.M."	120.16
Brookhurst, 0.9 mile southeast of, on north end of concrete culvert 507–D; chiseled cross, marked "U.S.B.M."	127.04
West Anaheim, 150 feet southeast of station, on concrete foundation of railroad water tank; chiseled cross, marked "U.S.B.M."	138.27
Anaheim, 0.8 mile south of, northeast corner of concrete culvert 159–E, at irrigation ditch; chiseled circle, marked "U.S.B.M."	163.77
Anaheim Tower, 0.3 mile northwest of, on base of signal semaphore; chiseled circle, marked "U.S.B.M."	157.25
Orange, 2 miles northwest of, northeast corner of Atchison, Topeka & Santa Fe Ry. bridge 171–B over Santa Ana River; chiseled cross, marked "U.S.B.M."	163.93

	Feet
Orange, in Orange High School, at north side of main entrance, in vertical surface of concrete water table, one-third of a meter above balustrade; U. S. Coast and Geodetic Survey b.m. tablet (U.S.C.& G.S. b.m. J–1)	197.654
Orange, in center of west side of plaza, 5 meters east of west fence; iron pipe set in cement (U.S.C.& G.S. post b.m. I–1)	187.178

CAPISTRANO QUADRANGLE

[Latitude 33°–33° 30′; longitude 117° 30′–118°]

ORANGE AND SAN DIEGO COUNTIES

Precise leveling by the U. S. Coast and Geodetic Survey in 1906

Northwest along Atchison, Topeka & Santa Fe Ry.

	Feet
V, four-tenths of a mile west of San Onofre, about 150 meters west of the county-road crossing, on the north side of the county road, one-third of a meter south of the Atchison, Topeka & Santa Fe right of way; stone post with hole, same as "M," San Luis Rey quadrangle	10.072
W, one-third of a mile northwest of Mateo, about 75 meters east of the Atchison, Topeka & Santa Fe Ry., 3 meters north of the county road and 4 meters west of the bridge, near the corner of a fence; iron pipe, same as "L"	15.213
X, two-thirds of a mile north of Serra, opposite the second telegraph pole southwest of milepost 199, half a meter southeast of the Atchison, Topeka & Santa Fe right of way, in corner of a fence, at foot of a hill; iron pipe, same as "L"	41.355
Y, San Juan Capistrano, northeast of the Capistrano mission, in the southwest corner of the public-school grounds; post	120.875

Primary leveling by C. C. Ward in 1899

From Capistrano southeast along Southern California R. R. to La Flores

Capistrano, in northwest corner of flower plot south of station and east of track; iron post stampel "103 S B" (recovered by U. S. Coast and Geodetic Survey)	104.032
San Onofre siding, 20 feet front from section bunk house, in yard; iron post stamped "28 S B" (recovered by U. S. Coast and Geodetic Survey)	28.757
Don (formerly Jerome), 2.4 miles northwest of, 50 feet east of track, in fence corner on south side of cattle crossing; iron post stamped "165 S B" (recovered by U. S. Coast and Geodetic Survey)	165.764

CORONA QUADRANGLE

[Latitude 33° 30′–34°; longitude 117° 30′–118°]

ORANGE, RIVERSIDE, LOS ANGELES, AND SAN BERNARDINO COUNTIES

Precise leveling by the U. S. Coast and Geodetic Survey in 1906

Northwest along Atchison, Topeka & Santa Fe Ry.

	Feet
Z, San Juan Capistrano, 0.25 mile north of the Atchison, Topeka & Santa Fe Ry. station, on the right of way, about 100 meters north of milepost 197, at the east end of a large concrete culvert, on the horizontal surface of the coping, one third of a meter from north end; Coast Survey b. m. tablet	115.856

	Feet
A_1, about 4⅓ miles south of El Toro, on the Atchison, Topeka & Santa Fe Ry. right of way, 1 telegraph pole north of road crossing, at west end of concrete culvert A 193, at center of horizontal surface of coping; a square 1 inch on each side, marked "U. S."	280.107
B_1, about 1½ miles southeast of Irvine, opposite half-mile pole 194½, at the corner of the public road, one third of a meter north of the Atchison, Topeka & Santa Fe Ry. right of way; stone post with hole, same as "M" San Luis Rey quadrangle	258.221
C_1, Irvine, 40 meters south of the Atchison, Topeka & Santa Fe Ry. station, in north corner of public-school grounds; stone post with hole, same as "M"	194.052
D_1, half a mile south of Aliso, on the public highway, at southwest corner of road crossing near milepost 178; iron pipe, same as "L"	81.391
E_1, Santa Ana, about 1½ miles southeast of Atchison, Topeka & Santa Fe Ry. station, 3½ telegraph poles west of milepost 177, at road crossing, on south side of track, in horizontal surface of irrigation culvert; copper bolt	105.800
F_1, Santa Ana, one-third of a mile south of the Atchison, Topeka & Santa Fe Ry. station, on north side of Chestnut Street, between the Southern Pacific Ry. and the Atchison, Topeka & Santa Fe Ry. on top of hydrant; highest point of star	123.114
City, Santa Ana, northwest corner of Third and Garfield streets; in center of a cement block; copper wire	128.166
G_1, Santa Ana, on northwest corner of the City Hall, in water table facing Third Street, 1.25 meters above the walk; Coast Survey b. m. tablet	124.288
H_1, Santa Ana, at the main entrance to the court-house, on southeast corner of east granite balustrade, 1 meter above the walk; 1-inch outlined square, unlettered	133.484
I_1, Orange, in center of west side of plaza, 5 meters east of west fence; iron pipe, set in cement, same as "L"	187.178
J_1, Orange, in the Orange Union High School Building, at north side of main entrance, in vertical surface of concrete water table, one-third of a meter above the balustrade; Coast Survey b. m. tablet	197.654
K_1, about 1¼ miles north of Orange, about 45 meters north of milepost 46, in southeast corner of road crossing, on land of N. T. Edwards; stone post with hole, same as "M"	188.622
L_1, Olive, about 225 meters northeast of Atchison, Topeka & Santa Fe Ry. station, in public-school grounds, in the angle formed by west side of front entrance and the main building, set in gravel; iron pipe, same as "L"	274.334
M_1, about seven-eighths of a mile north of Olive, on the Atchison, Topeka & Santa Fe Ry. right of way, about 165 meters south of milepost 43, at the northeast corner of the plate-girder bridge A 44, on the northeast corner of the steel base, about two-thirds of a meter below the rail; 1-inch outlined square in iron, unlettered	241.236
N_1, Richfield, about 40 meters north of railroad station, in northwest corner of highway junction, in range with telephone poles; stone post with hole, same as "M"	246.532

Feet

O_1, Horse Shoe Bend, 1½ telegraph poles southwest of signboard "Horse Shoe Bend," at the road crossing, 8 meters south of small highway bridge, on sloping surface of concrete coping; Coast Survey b. m. tablet 381.968

P_1, about 1⅛ miles west of Gypsum, on the Atchison, Topeka & Santa Fe right of way, at north end of county culvert C 35, on horizontal surface of coping, one-third of a meter from east end; copper bolt, lettered "U. S." 402.112

Q_1, about 1 mile southwest of Crary, on the Atchison, Topeka & Santa Fe Ry. right of way, 23 meters south of milepost 29, 14 meters west of track, on north slope of small knoll; iron pipe, same as "L" 470.167

R_1 about two-thirds of a mile northeast of Crary, on the Atchison, Topeka & Santa Fe Ry. right of way, at northwest corner of road crossing; stone post with hole, same as "M" 507.332

S_1, Corona, directly south of Atchison, Topeka & Santa Fe Ry. station, in center of triangular park belonging to the railroad company; iron pipe, same as "L" 606.482

T_1, Corona, on west side of Main Street, in the northeast corner of Masonic Block, half a meter from the east face and 1⅓ meters above the walk; copper bolt 685.688

City, Corona, at northwest corner of Main and Sixth streets, 2 meters northeast of main entrance to Citizens' Bank; a metal plug set in the cement walk, corresponds to 171.20 feet, city datum 673.991

U_1, within the city limits, Riverside, 1 telegraph pole southwest of signboard "Alvord," in easterly corner of road crossing, on land owned by J. T. Hammer; iron pipe, same as "L" 669.579

STANDARD BENCH MARKS BY THE UNITED STATES GEOLOGICAL SURVEY

Primary leveling by C. C. Ward, Geo. H. Herrold, and C. R. Smith in 1899

From Magnolia Crossing southwest along Magnolia Avenue and northwest along highway to Rincon, thence southwest along road to Olive

May, 0.25 mile southwest of signboard (within city limits of Riverside), on Magnolia Avenue, 250 feet northeast of crossing, in line with center row of trees; iron post stamped "687" (recovered by U. S. Coast and Geodetic Survey) 688.010

Corona, at southwest corner of Buena Vista Avenue and Lemon Street (pipe line No. 2); iron post stamped "1049 S. B." 1,052.077

Crary (Rincon post office), on north side of street, at southeast corner of post office and store; iron post stamped "494 S. B." (recovered by U. S. Coast and Geodetic Survey) 494.769

Rincon, 7.3 miles west of, at head of grade where road finally leaves the sidehill slopes of Santa Ana Canyon, on north side of road; iron post stamped "402 S B" 402.786

From Olive southeast up Santiago Creek Road to Divide, thence southwest down Aliso Creek to El Toro

Olive, 7.7 miles southeast of, at northeast corner of fence of Orange County Park, 20 feet to the right of road; iron post stamped "610 S B" 611.081

	Feet
Olive, 13.7 miles southeast of, where road to Silverado turns off to east up side of gulch, 8 feet west of main road; iron post stamped "977 S B"	978.396
Olive, 17 miles southeast of along Santiago Creek, where Santiago Canyon road to El Toro begins to climb sidehill to cross divide into Aliso Canyon; iron post stamped "1271 S B"	1,271.623
Aliso schoolhouse, about 45 feet from, in northwest corner of yard; iron post stamped "1041 S B"	1,041.958

From El Toro south along Southern California R. R. to Capistrano

El Toro schoolhouse, 2 feet from front of, in angle formed by porch and building; iron post stamped "444 S B" (recovered by U. S. Coast and Geodetic Survey)	445.016
El Toro, 4.33 miles south of, 40 feet east of track, at road crossing, in fence corner; iron post stamped "278 S B"	279.243

From Temescal northwest along road to Corona

Rugby district school, north side of sec. 21, T. 4 S., R. 6 W., northeast corner of grounds; iron post stamped "897"	898.220
Corona, southeast angle of, Porphyry quarry and Corona road; iron post stamped "903"	904.297

From Rincon north along road to Del Chino, thence east to La Sierra ranch, thence south to Corona

Chino rancho, where Central Avenue crosses road running east and west, in northwest angle of road, 1.5 miles south of Southern Pacific station at Chino; iron post stamped "633 S B"	633.681
Chino rancho, at southeast corner of boundary; iron post stamped "602 S B"	603.469
La Sierra rancho (Sepulveda), 1 mile south of Cooks Ford, east side of road from Corona; iron post stamped "683 S B"	684.283

From Esperanza siding northerly via wagon road to San Juan triangulation station

San Juan triangulation station, in top of stone and cement monument; aluminum tablet stamped "1780 S B"	1,781.174

From Capistrano northeast up San Juan Canyon

Capistrano, 2 miles east of, 320 feet east of southwest corner sec. 32, T. 7 S., R. 7 W., north side of road; iron post stamped "149 S B"	150.008

ELSINORE QUADRANGLE

[Latitude 33° 30′–34°; longitude 117°–117° 30′]

RIVERSIDE AND ORANGE COUNTIES

Checked primary leveling by R. A. Farmer in 1902

Southeast along Southern Pacific R. R. in northeast part of quadrangle

	Feet
San Timoteo district school, northwest corner of grounds; iron post stamped "1910 S B"	1,911.487
T. 3 S., between R's. 2 and 1 W., north side of county road; iron post stamped "2297 S B"	2,298.085

Primary leveling by George H. Herrold in 1897–98

From Riverside southwest along Southern California R. R. to Magnolia Avenue crossing

	Feet
Riverside, in alcove on right of main entrance to Loring Opera House, 4 feet above sidewalk, bronze tablet stamped "851" (recovered by U. S. Coast and Geodetic Survey)	851.842
Riverside, in alcove on right of main entrance to Loring Opera House, 1 foot above sidewalk, official city bench mark (elevation of which by city datum is 848.777); copper bolt	848.913
Olivewood Cemetery, at canal crossing, 0.5 mile north of Pachapa siding; iron post stamped "863" (recovered by U. S. Coast and Geodetic Survey)	863.650
Casa Blanca, in southeast concrete foundation pier of station platform, 1 foot underground, protected by covered tin cylinder 4 inches high; copper bolt stamped "861" (recovered by U. S. Coast and Geodetic Survey)	861.980
Arlington, center of Southern California R. R. station park; iron post stamped "814" (recovered by U. S. Coast and Geodetic Survey)	815.500

From Riverside east to Box Springs, thence north to High Grove

Riverside, Gage Canal at Eighth Street, in concrete bulkhead north of bridge; copper bolt stamped "1019"	1,020.081
Box Springs station, near crossing of Box Springs road and railroad, 65 feet west of track, 30 feet west of road; iron post stamped "1539"	1,540.324

From Box Springs south along Southern California R. R. to Valverde

Valverde, east wall of brick warehouse, 4.5 feet above ground; copper bolt stamped "1509"	1,510.130

At Temescal

Temescal, southwest corner of district-school grounds; iron post stamped "1114"	1,114.692

From Arlington southeast to El Sobrante, thence east to point near Valverde

Mocking Bird Canyon, south of boulder dam (natural), on Hogback, 50 feet south of road; iron post stamped "1219"	1,219.796
El Sobrante, 75 feet northeast of crossing of Gavilan mine and tin-mine roads; iron post stamped "1447"	1,448.083
North Mount Glen, center of sec. 10, T. 4 S., R. 4 W., in northwest corner of school grounds and at southeast corner of crossing of Elsinore and Corona roads; iron post stamped "1651"	1,652.307

From Valverde along Southern California R. R. to Perris, thence southwest to Elsinore

Perris, Santa Fe station, south wall of brick corridor; bronze tablet stamped "1456"	1,456.897
Canyon siding, 4.5 miles south of Perris, 30 feet north of road where it leaves canyon and crosses over hills to west; iron post stamped "1399"	1,400.060
Menifee road, east of bridge over San Jacinto River and east of railroad track on south side of road; iron post stamped "1318" (destroyed)	1,318.940

	Feet
Elsinore, Consolidated Bank Building, in brickwork on right side of corner entrance; bronze tablet stamped "1305"	1,305.953
From Elsinore northwest along Southern California R. R. and highway to Temescal	
Terra Cotta, 1 mile east of, east of road forks, 3.5 miles northwest of Elsinore; iron post stamped "1258"	1,258.546
T. 5 S., R. 5 W., sec. 7, 3 feet east of quarter-section post of secs. 7 and 12, north of Temescal road; iron post stamped "1142"	1,143.344
From point near Valverde east to Perris Indian School	
Perris Indian School, east side of sec. 7, T. 4 S., R. 3 E., in brick balcony at south side of steps at southwest entrance to main building; copper bolt stamped "1456"	1,457.373
From Box Springs east along road to Moreno, thence south to Lakeview, thence southwest along Southern California R. R. to Perris	
Box Springs, north of siding, 65 feet west of Southern California R. R. track and 30 feet west of road, at crossing of Box Springs road and railroad; iron post stamped "1539"	1,540.264
Alessandro Boulevard and Heacock Street, at northeast corner of street, T. 3 S., between Rs. 3 and 4 W.; iron post stamped "1565"	1,565.652
Moreno, in front wall of brick store, southeast corner of streets; bronze tablet stamped "1600"	1,600.796
Lake Bottom road, 50 feet west of, in granite boulder 2 feet high, 12 by 5 feet, at east point of hill 3 miles north of Lakeview; copper bolt stamped "1430"	1,430.970
Lakeview, public-school grounds, northeast angle of lawn; iron post stamped "1468"	1,470.023
From Lakeview southeast along road to Casa Loma	
Casa Loma ranch, at northeast fence corner, San Jacinto road and line between Rs. 1 and 2 W., T. 4 S.; iron post stamped "1466"	1,466.794
From Perris southeast along Southern California R. R. (San Jacinto division) to Winchester, thence northeast along same to Hemet	
Benedict School, northeast corner of grounds and northeast corner of sec. 24, T. 5 S., R. 3 W., iron post stamped "1500"	1,500.636
Winchester, east of front entrance of public-school building; bronze tablet stamped "1470"	1,470.8
Egan siding, 1 mile southwest of, on line between Rs. 1 and 2 W., T. 5 S., north line of right of way; iron post stamped "1502"	1,503.449
From Elsinore southeast along Southern California R. R. to Temecula	
Wildomar, corner Main Street and Murrieta road, in angle of L-shaped schoolhouse grounds; iron post stamped "1254"	1,254.933
Murrieta, in southwest corner of public-school grounds; iron post stamped "1092"	1,093.166
From Temecula north along road to Winchester	
T. 7 S., R. 3 W., near range line east of sec. 13, top of grade; iron post stamped "1309"	1,309.786
Alamos district-school grounds, east side sec. 5, T. 7 S., R. 2 W., 35 feet east of building; iron post stamped "1375"	1,376.207

	Feet
T. 6 S., R. 2 W., sec. 28, 335 feet north of bridge; iron post stamped "1419"	1,419.716
T. 6 S., R. 2 W., northwest corner sec. 10, Domenigoni Valley, 2.5 miles south of Winchester, at southeast corner of fence, at road to Hemet; iron post stamped "1458"	1,458.654

Precise leveling by the U. S. Coast and Geodetic Survey in 1906

Northeast along Atchison, Topeka & Santa Fe Ry.

V_1, within the city limits, Riverside, about 2.75 miles southwest of Arlington, at milepost 19, at southernmost corner of road crossing, 1 meter northwest of telegraph pole; stone post with hole, same as "M"	720.583
W_1, within the city limits, Riverside, half a mile northeast of Arlington, 4 telegraph poles northeast of milepost 16, in the northwest corner of road crossing on land owned by R. L. Carpenter; stone post, with hole, same as "M"	846.320
X_1, within the city limits, Riverside, about 1 mile southwest of Casa Blanca, on the Atchison, Topeka & Santa Fe Ry. right of way, 2½ telegraph poles northeast of milepost 15, on northwest side of northeast concrete abutment of trestle D 15, on the horizontal surface, at the angle; 1-inch outlined square, unlettered	847.757
Y_1, Riverside, on the north side of the county courthouse, 2 meters west of northeast corner, in the center of small projection, one-third of a meter above ground; copper bolt	848.207
Z_1, Riverside, at east side of main entrance to Carnegie Public Library, on horizontal surface of cement balustrade, one-third of a meter from building; Coast Survey b. m. tablet	857.669

SAN LUIS REY QUADRANGLE

[Latitude 33°–33° 30′; longitude 117°–117° 30′]

RIVERSIDE AND SAN DIEGO COUNTIES

Primary leveling by C. C. Ward in 1899 and by G. H. Herrold in 1898

From Temecula along road south via Rainbow to sec. 31, T. 10 S., R. 3 W. (double-rodded line)

	Feet
Temecula, in west foundation wall of schoolhouse; bronze tablet stamped "1019"	1,019.194
Temecula, 3.75 miles southeast of, east side of road, in north face of granite boulder 18 feet high and 12 feet broad; copper bolt stamped "U. S. G. S. 1155 Ft."	1,155.885
Rainbow post office, 1.5 miles north of, on west side of Temecula road, in south end of boulder 2.5 feet high, 15 feet long, and 5 feet wide, under a double oak tree in fence line; copper bolt stamped "U. S. G. S. 1164 Ft. B. M."	1,164.881
Rainbow, at northeast corner of Vallecitos schoolhouse grounds; iron post stamped "1044"	1,044.796
T. 10 S., R. 2 W., northwest corner, 200 feet south of oak tree, on west side of Rainbow-Bonsall road at junction with Palla road; iron post stamped "290"	290.835
San Luis Rey River, north bank of, on north side of Bonsall-Palla road, in granite boulder; copper bolt stamped "U. S. G. S. 274 Ft. B. M."	274.960

	Feet
Bonsall, in center of street north of post office, in top of boulder 12 feet in diameter, 6 feet high; copper bolt stamped "U. S. G. S. 172 Ft. B. M."	172.921
Bonsall, 2.25 miles south of, at junction of Vista and Oceanside roads, near fence corner; iron post stamped "155"	155.973

From spur 2 miles east of San Luis Rey north to southwest corner sec. 34, T. 10 S., R. 4 W.

T. 10 S., R. 4 W., southwest corner of sec. 34, 24 feet northeast of forks of road; iron post stamped "112 T"	112.814

From Temecula east up Temecula River to vicinity of Pauba grant

Pauba ranch house, 0.25 mile south of, northeast of forks of road; iron post stamped "1090 T"	1,090.873
Temecula, 6.5 miles east of, at irrigating ditch and double-fork road, north of road; iron post stamped "1161 T"	1,161.802
Temecula, 8.5 miles east of, southeast corner of private-road crossing, just west of dry wash of Temecula River; iron post stamped "1228 T"	1,228.875

From Monserate school east via Pala to vicinity of Pauma ranch

Monserate schoolhouse, 2 feet south of, under window; iron post stamped "351 T"	351.828
Pala, 10 feet south of southwest corner of mission; iron post stamped "411 T"	411.774
Pala, 1.75 miles east of, at fork of road to Aqua Tibia ranch, northeast of road; iron post stamped "568 T"	569.130
Pala, 3 miles east of, fork of road to Pala Mills, north of road; iron post stamped "557 T"	557.829
Pauma ranch, southeast of fork of road to ranch house; iron post stamped "758 T"	758.808

From spur south from Pala 2 miles

Pala, 2 miles south of, northeast of forks of road; iron post stamped "481 T"	481.899

From point near Outing southwest to Deluz, thence south to Deluz station

Sandia Canyon, in forks of Linda Rosa and Fallbrook road and road to Deluz; iron post stamped "837 T"	837.522
Deluz, 1.25 miles south of, 30 feet west of forks of road to schoolhouse (Deluz), in bed rock; copper bolt stamped "379 T"	380.009
Deluz station, 12 feet northwest of switch south of; iron post stamped "146 T"	146.925

From Rainbow west via Fallbrook to Deluz station

Red Mountain ranch, just east of, northwest of forks of road; iron post stamped "1063 T"	1,063.760
Fallbrook, 50 feet north of schoolhouse, south side of Elder Street; iron post stamped "732 T"	732.760

From Deluz station south along Southern California R. R. to Ysidora; thence west to Las Flores

	Feet
Santa Margarita ranch house, southwest corner of retaining wall around, in middle pin; bronze tablet stamped "87 T"	87.757
Ysidora, 40 feet east of track, north side of road at fence corner; iron post stamped "23 T"	23.679
Ysidora, 1.5 miles west of, north of road at summit; iron post stamped "411 T"	411.796
Las Flores, 10 feet southwest of water tank, east of track; iron post stamped "84 T (S. B.)" (recovered by U. S. Coast and Geodetic Survey)	84.822

From Las Flores northeast up Las Pulgas Canyon to Las Pulgas corral

Las Pulgas corral, 0.5 mile northeast of, east side of Las Flores Creek, on side of hill; iron post stamped "293 T"	293.752

From Bonsall southeast to Moosa

Moosa, 15 feet southwest of house next east of post office; iron post stamped "458 T"	458.821

From point near Bonsall south to Vista, thence southeast along Atchison, Topeka & Santa Fe Ry. and county road to Green Valley (double-rodded line)

Delphi, northwest corner of schoolhouse grounds; iron post stamped "491"	491.806
Vista, 50 feet northeast of Escondido branch railroad track, on southwest side of county road, in row of eucalyptus trees east of railroad crossing; iron post stamped "330"	330.870
San Marcos, close to schoolhouse, in angle of porch and front of building; iron post stamped "582"	582.826
Richland, in row of eucalyptus trees, at southern corner of school grounds, 50 feet northeast of track and 35 feet northwest of road center; iron post stamped "634"	634.920
Escondido, northeast corner of iron footplate of step at entrance to drug store, on lot 15, next to bank and post-office building, on Main Street; official city bench mark	654.661
Escondido, college building on hill, in north wall of main entrance to corridor in basement, 4 feet above ground; bronze tablet stamped "754"	754.948
Escondido, 2.5 miles south of, on San Diego road at junction; iron post stamped "530"	530.959
Bernardo post office, 625 feet north of Bernardo River bridge, on west side of county road; iron post stamped "319"	319.983
Green Valley, in sloping boulder 4 feet high, east of large boulder pile, west side of San Diego road and 80 feet north of bridge; copper bolt stamped "U. S. G. S. 482 ft. B.M."	482.976

From Bernardo northeast along River Road to San Pasqual

Glenella schoolhouse, 80 feet southwest of, in yard; iron post stamped "381 T"	381.763
San Pasqual schoolhouse, in yard at east side of gate; iron post stamped "366 T"	366.791

From Ysidora southeast to San Luis Rey, thence northeast to point near Bonsall

	Feet
San Luis Rey, northeast corner of schoolhouse grounds; iron post stamped "76 T"	76.579

Precise marks of the United States Coast and Geodetic Survey along the Atchison, Topeka & Santa Fe Ry. in 1906

K, about 1.25 miles southeast of Encinitas, on the Atchison, Topeka & Santa Fe Ry. right of way, at southwest end of concrete culvert A 240, in center of horizontal surface of coping; copper bolt	72.782
L, Encinitas, 0.25 mile west of Atchison, Topeka & Santa Fe Ry. station, at Third and E streets in public-school grounds, in middle of front yard, about 35 meters east of schoolhouse; iron pipe, set in cement. (U. S. C. & G. S. b. m. post)	91.995
M, about 0.66 mile southeast of Carlsbad, 1 telegraph pole northwest of milepost 230, at east corner of road crossing, at intersection of Atchison, Topeka & Santa Fe Ry. right of way and cattle-yard fences; bottom of a hole 2.5 cm. square and about 4 mm. deep, cut in top of a stone post whose top is 6 inches square, projecting 6 inches above ground, and lettered "U. S. B. M"	44.216
N, Carlsbad, about 175 meters southwest of Atchison, Topeka & Santa Fe Ry. station, in the park owned by the Huntington Syndicate Co., at east corner of most northerly house, at south end of first concrete basement step; copper bolt	55.554
O, Oceanside, about 60 meters south of Atchison, Topeka & Santa Fe Ry. station, on railroad property, about 10 meters southwest of track, one-third of a meter outside of fence; stone post with hole, same as "M"	44.484
P, Oceanside, on south corner of First and Ditmar streets, in northeast side of First Methodist Episcopal Church, 0.66 meter from north corner and 1 meter above ground; copper bolt	83.875
Q, Oceanside, at west corner of Second and Hill streets, on step of side entrance to Bank of Oceanside Building; surface of an outlined square 1 inch on each side, unlettered	67.697
R, Oceanside, on northwest side of Third Street, between Tremont and Hill streets, in the brick store 2½ blocks northeast of the Atchison, Topeka & Santa Fe Ry.; Coast Survey b. m. tablet	64.505
S, about 0.66 mile southeast of Las Flores, on the Atchison, Topeka & Santa Fe Ry. right of way, 9½ telegraph poles southeast of milepost 219, 12 meters southwest of track; iron pipe set in clay	75.029
T, about one-third of a mile southeast of Las Flores, on the Atchison, Topeka & Santa Fe Ry. right of way, 1½ telegraph poles southeast of milepost 219, at southwest end of concrete culvert A 220, in horizontal surface of coping, one-third of a meter from northwest corner, 3 meters below rail; copper bolt	58.402
U, Don, about 45 meters west of signboard "Don," between the Atchison, Topeka & Santa Fe Ry. right of way fence and first telephone pole northwest of warehouse; stone post with hole, same as "M"	136.824

DEGREE QUADRANGLE 33°–34°, 118°–119°

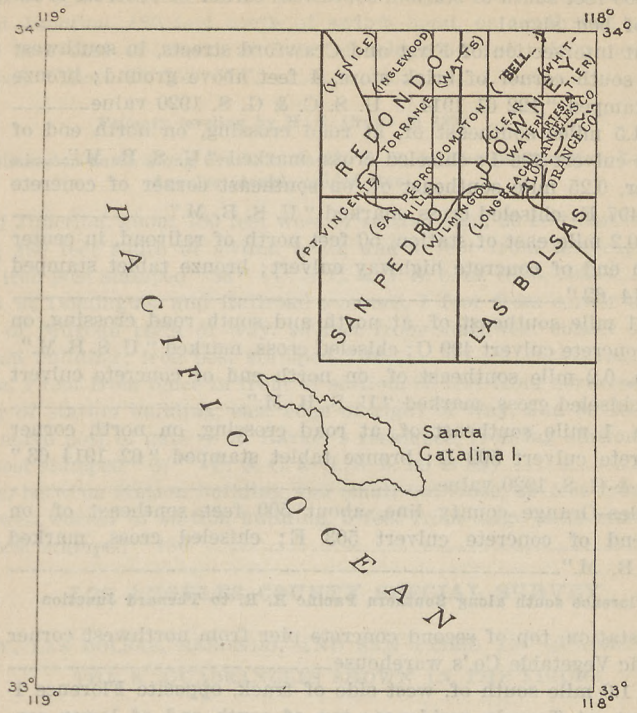


FIGURE 9.—Diagram of degree quadrangle 33°–34°, 118°–119°

DOWNEY QUADRANGLE

[Latitude 33° 45′–34°; longitude 118°–118° 15′]

LOS ANGELES AND ORANGE COUNTIES

Precise leveling by L. F. Biggs in 1914

From Ramona southeast along Southern Pacific R. R. to Buena Park

	Feet
Ramona Tile Works office, at west entrance; top of first concrete step	189.84
Florence, 15 feet east of railroad, at Florence Ave. crossing, north end of concrete culvert marked "U. S. B. M."	155.65
Florence station, Pacific Vegetable Co.'s warehouse, top of second concrete pier from northwest corner; aluminum tag stamped (?)	133.53
Florence station 0.6 mile east of, east edge of Long Beach Bvd., 15 feet north of track, in north end of concrete culvert; bronze tablet stamped "123 1914 60." U. S. C. & G. S. 1920 value	122.683
Florence, 2.2 miles southeast of, on northwest pier of steel bridge; chiseled cross marked "U. S. B. M."	128.15
Cudahy, 60 feet west of station, on northeast corner of concrete culvert; chiseled cross marked "U. S. B. M."	115.74
Vineland, 400 feet southeast of station, 50 feet south of track; point on southeast foundation of power tower	109.62

	Feet
Downey, 1 mile northwest of, in base of railroad signboard; spike	113.78
Downey, 500 feet south of station, southwest corner of concrete foundation of belt signal	117.04
Downey, at intersection of First and Crawford streets, in southwest wall at south corner of brick store, 4 feet above ground; bronze tablet stamped "122 61 1914." U. S. C. & G. S. 1920 value	121.972
Downey, 1.5 miles southeast of, at road crossing, on north end of concrete culvert 496 I; chiseled cross, marked "U. S. B. M."	104.28
Studebaker, 0.25 mile southeast of, on southeast corner of concrete culvert 497 F; chiseled cross, marked "U. S. B. M."	104.28
Norwalk, 0.2 mile east of station, 50 feet north of railroad, in center of south end of concrete highway culvert; bronze tablet stamped "96 1914 62"	96.119
Norwalk, 1 mile southeast of, at north and south road crossing, on end of concrete culvert 499 C; chiseled cross, marked "U. S. B. M."	84.25
Carmenita, 0.2 mile southeast of, on north end of concrete culvert 501 B; chiseled cross, marked "U. S. B. M."	68.50
Carmenita, 1 mile southeast of, at road crossing, on north corner of concrete culvert 502 D; bronze tablet stamped "62 1914 63" U. S. C. & G. S. 1920 value	61.644
Los Angeles–Orange county line, about 500 feet southeast of, on north end of concrete culvert 503 E; chiseled cross, marked "U. S. B. M."	64.47
From Florence south along Southern Pacific R. R. to Thenard Junction	
Florence station, top of second concrete pier from northwest corner of Pacific Vegetable Co.'s warehouse	133.53
Florence, 1.0 mile south of, west side of track, opposite Florence 1-mile post, at Tweedy residence; top of south end of lower concrete step	112.16
Palermo, 20 feet north of Pacific Electric Power station, on north end of concrete abutment; chiseled cross, marked "U. S. B. M."	96.83
Belle Vernon; top of rail	81.05
Compton, 1 mile north of, northeast corner of concrete culvert 492 C; chiseled cross, marked "U. S. B. M."	76.63
Compton, 100 feet east of railroad crossing, south side of Long Beach Bvd., on concrete culvert; chiseled cross, marked "U. S. B. M."	69.21
Compton, east edge of right of way, opposite depot; iron post stamped "67"	66.959
Compton, 1.2 miles south of, at road crossing 495 A B, in railroad crossing signboard; spike	60.45
Dominguez Junction, at south edge of south door of west entrance to Pacific Electric Power house, 12 feet from southeast corner of building, 3.5 feet above ground, on top of concrete floor; chiseled cross, marked "U. S. B. M."	58.85
Road crossing 496 D E; top of rail	45.36
Elftman (Cerrillos), 500 feet south of road crossing, on west end of concrete culvert 497 E; chiseled point marked "U. S. B. M."	31.63
Dolores, Dominguez Water Co.'s pump house, at south end of central door; point on concrete sidewalk	28.34
Dolores, Dominguez Water Co.'s power house, in west concrete wall, 18 inches south of central door, 5 feet above walk; bronze tablet stamped "33 1914 68"	33.314

Feet

Watson, 40 feet northeast of station, at crossroads, in base of mile post 500; spike 24.15

Thenard Junction, 180 feet south of switch head, on north end of Y, 20 feet east of track, at base of telephone pole; iron post stamped "Elev. 33 No. 67" 32.812

Primary leveling by H. S. Crowe in 1897

From Wilmington north along Southern Pacific R. R. to Clement Junction, Los Angeles (double-rodded line)

Thenard Junction, about 100 feet west of station sign, 20 feet east of track, 180 feet south of switch head, and 1 foot from telegraph pole; iron post stamped "33" (U. S. C. & G. S. b. m. G 33, 1920) 32.812

Cerritos, at Dominguez and Railroad avenues, 1 foot from corner of fence of railroad right of way, 96 feet from southwest corner of railroad building; iron post stamped "32" 31.757

Compton, 1 foot from fence in front of station, 88 feet from northeast corner of station building, east edge of right of way, and 30 feet from north post of gate to R. Barker's residence, fronting station; iron post stamped "67" (U. S. C. & G. S. b. m. D 33) 66.959

Florence, between station building and small outhouse, 39 feet from southwest corner of station building, 5 feet from large palm tree; iron post stamped "136" 136.052

LOS ANGELES COUNTY SPECIAL SURVEY

DOWNEY, LAS BOLSAS, REDONDO, AND SAN PEDRO 15′ QUADRANGLES AND THE 6′ QUADRANGLES SHOWN IN THE FIGURE

[Latitude 33° 30′–34°; longitude 118°–118° 30′]

Precise leveling by U. S. Coast and Geodetic Survey in 1920 and by L. F. Biggs, of the U. S. Geological Survey, in 1914 and primary leveling by H. S. Senseney and C. W. H. Nessler in 1923 and others

Precise leveling by U. S. Coast and Geodetic Survey in 1920 over route of U. S. Geological Survey precise line by L. F. Biggs in 1914

From Pasadena quadrangle south along Southern Pacific R. R. to San Pedro

Feet

Y–32, Florence, at southwest intersection of Nadeau and Alameda streets, 50 feet east of Southern Pacific tracks, in sidewalk immediately in front of grocery store of C. O. P. Smith, near east corner of building; red metal disk 141.581

B–33, Compton, 1.2 miles north of, at mileage 493, west of track, on highway culvert opposite 492–G, east side of roadway; red metal disk 75.315

C–33, Compton, I. O. O. F. building, which is a large red brick building about 400 feet west of Southern Pacific tracks, on Main St., right side of main entrance, set in nook in wall in sidewalk; red metal disk 68.487

D–33, Compton, opposite Southern Pacific R. R. station, at east edge of right of way at fence line; Geological Survey iron post stamped "67" 66.959

E–33, Compton, 2.1 miles south of, at mileage 496.2, at crossing of Pacific Electric tracks, 80 meters east of crossing, west of track, on top face of concrete culvert 496–B; the center of "9" in 1918 ..... 51.401

	Feet
F–33, Dolores, at mileage 498.3, Dominguez Water Co.'s power house, in west concrete wall, 18 inches south of central door, 5 feet above ground; Geological Survey bronze tablet stamped "33 1914 68"	33.314
G–33, Thenard Junction, at mileage 501.4, 180 feet south of switch head, on north end of Y, 20 feet east of track, at base of telegraph pole; Geological Survey iron post stamped "Elev. 33 No. 67"	32.812
H–33, Wilmington, 153 feet from southwest corner of station and opposite to same; Geological Survey iron post stamped "7." (The surrounding land was later covered with about 6 feet of earth. The bench mark was surrounded with a 10-inch sheet-iron pipe, which protects it, and a rod can be held on it by putting the rod down the pipe. Filling in the land at this place has probably changed the elevation of the bench mark)	6.585
I–33, San Pedro, on north side of City Hall, at main entrance on Beacon Street, on top face of banister post, about 5 feet above ground; Geological Survey bronze tablet set horizontally flush with top face	30.049
J–33, City Library, at summit of hill on Beacon Street, near City Hall, at left side of main entrance, on east end of first step; red metal disk	72.172
K–33, in San Pedro, Public School Building, on Center Street, set in banister on left side of main entrance, about 2 feet above ground; red metal disk	103.628
U. S. B. M. Q., at San Pedro, in northeast corner of double work of east jetty, in concrete monument 1.5 feet square; copper bolt	7.155

Additional bench marks on preceding route by L. F. Biggs in 1914

Ramona Tile Works office, at west entrance; top of first concrete step	189.84
Florence station, Pacific Vegetable Co.'s warehouse, top of second concrete pier from northwest corner of	133.53
Florence, 1.0 mile south of, west side of track, opposite Florence 1-mile post, at Tweedy residence; top of south end of lower concrete step	112.19
Palermo, 20 feet north of Pacific Electric station, on north end of concrete abutment; chiseled cross, marked "U.S.B.M."	96.84
Belle Vernon; top of rail	81.1
Compton, 1 mile north of, northeast corner of concrete culvert 492–C; chiseled cross, marked "U.S.B.M."	76.65
Compton, south side of Long Beach Bvd., 100 feet east of railroad crossing, on concrete culvert; chiseled cross, marked "U. S. B. M."	69.18
Compton, 1.2 miles south of, at road crossing 495–A B, in railroad crossing signboard; spike	60.45
Dominguez Junction, at west entrance to Pacific Electric Power house, at south edge of south door, 12 feet from southwest corner of building and 3.5 feet above ground, on top of concrete floor; chiseled cross, marked "U.S.B.M."	58.85
Road crossing 496–D E; top of rail	45.36
Elftman (Cerritos), 500 feet south of road crossing, on west end of concrete culvert 497–E; chiseled point marked "U.S.B.M."	31.63
Dolores, Dominguez Water Co.'s pump house, at south end of central door; point on concrete sidewalk	28.34
Watson, 40 feet northeast of station, at crossroads, in base of milepost 500; spike	24.15

	Feet
Wilmington, west side of Canal Street, at north edge of Front Street, in concrete curb; iron pin, "U. S. B. M. chiseled on curb"	12.10
Wilmington, east side of Canal Street, in line with north side of Front Street; lead plug with copper nail marked "U. S. B. M."	12.24
Wilmington, about 3,000 feet west of station, 20 feet south of track, 800 feet north of east end of new pier A, Los Angeles shed 1, top of concrete under tripod (apparently a Harbor Survey triangulation station); cement flush with ground	5.13

At San Pedro

San Pedro, Southern Pacific and Pacific Electric railroads drawbridge, on east end of north concrete pier; chiseled cross, marked "U. S. B. M."	6.33
San Pedro, at Front and Fifth streets; in northeast corner of concrete sidewalk; iron pin	14.23
San Pedro, City b. m. No. 1, on south side of Sixth Street between Front and Beacon streets, on stone step in front of cigar stand; a brass screw	16.860
San Pedro, Beacon Street, 3 feet north of Sixth Street, opposite bank, in cement curb; spike (Los Angeles datum 11.112)	16.795
San Pedro, Front Street, 3 feet north of wall, west side of pepper tree; nail (?)	21.238
San Pedro, brick building of Bank of San Pedro, top of upper stone of foundation; U. S. C. & G. S. bench mark (of 1890)	22.343

From Florence along Southern Pacific R. R. through north part of Downey quadrangle to Rio Hondo, thence southeast to Buena Park, Anaheim quadrangle

Z–32, Florence, 600 feet north of station, at mileage 488.95, on most easterly of four central piers supporting large water tank, west of track, head of bolt. Bolt is nearer of two to tracks	140.977
A–33, Florence, mileage 489.1, in northwest corner of small grass plot immediately north of station, in top of irregular granite block set in ground with top protruding about 6 inches; red metal disk	136.617
M–33, Florence, 0.6 mile east of, on Southern Pacific line leading toward Santa Ana, east edge of Long Beach Boulevard, 15 feet north of track, in north end of concrete culvert; Geological Survey bronze tablet stamped "123, 1914, 60"	122.683
N–33, Florence, 2.4 miles east of, at mileage 491.4, on old west abutment of bridge (now a fill), 3 meters north of track, a rounded knob on top face of granite block flush with roadbed; square on concrete	128.185
O–33, near Cudahy R. R. crossing, mileage 492, 0.2 mile east of tower, on west side of concrete culvert 492–C; red metal disk	112.841
P–33, Downey, at crossing of Crawford Street and Southern Pacific R. R. at point of switch, southwest side of track, 5 meters northwest of road, in face of concrete culvert 495–A; red metal disk	116.056
Q–33, at Downey, at intersection of First and Crawford streets, in southwest wall at south corner of brick store, 4 feet above ground; a Geological Survey bronze tablet stamped "122, 61, 1914"	121.972
R–33, Studebaker, 0.25 mile southeast of, at mileage 497+, on northwest end of concrete culvert 497–F, southwest of tracks, red metal disk	104.294

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	Feet
S–33, Norwalk, 0.6 mile southeast of station, 50 meters northeast of track, on southwest side of concrete highway bridge at level of roadway, opposite point of Southern Pacific siding; red metal disk	94.203
T–33, Carmenita, 1 mile southeast of, just southeast of road crossing; on north corner of concrete culvert 502–D; Geological Survey bronze tablet stamped "62, 1914, 63"	61.644
Florence, Florence Avenue railroad crossing, 15 feet east of railroad; north end of concrete culvert marked "U. S. B. M."	155.65
Florence station, top of second concrete pier from northwest corner of Pacific Vegetable Co. warehouse; aluminum tag	133.53
Florence, 2.2 miles southeast of, on northwest pier of steel bridge; chiseled cross marked "U. S. B. M."	128.15
Cudahy, 60 feet west of station, on northeast corner of concrete culvert; chiseled cross marked "U. S. B. M."	115.74
Vineland, 400 feet southeast of station, 50 feet south of track; point on southeast foundation of power tower	109.62
Downey, 1 mile northwest of, in base of railroad signboard; spike	113.78
Downey, 500 feet south of station, point at southwest corner of concrete foundation of bell signal	117.04
Downey, 1.5 miles southeast of, at road crossing, on north end of concrete culvert 496–I; chiseled cross, marked "U. S. B. M."	109.48
Studebaker, 0.25 mile southeast of, on southeast corner of concrete culvert 497–F; chiseled cross, marked "U. S. B. M."	104.28
Norwalk, 0.2 mile east of station, 50 feet north of railroad, in center of south end of concrete highway culvert; bronze tablet stamped "96, 1914, 62"	96.119
Norwalk, 1 mile southeast of, at north and south road crossing; on north end of concrete culvert 499–C; at chiseled cross marked "U. S. B. M."	84.25
Carmenita, 0.2 mile southeast of, on north end of concrete culvert 501–B; chiseled cross, marked "U. S. B. M."	68.50
Los Angeles-Orange county line, about 500 feet southeast of, on north end of concrete culvert 503–E; chiseled cross, marked "U. S. B. M."	64.47

* Primary leveling by C. W. H. Nessler in 1923

From south border of Sawtelle 6′ quadrangle along highways south and west to Playa del Rey, thence northwest to Santa Monica

Playa del Rey, 3 miles northeast of, at car stop known as Cypress Grove, 20 feet south of center of east-bound Del Rey Pacific Electric track, on east edge of Ballona Road, in an 8 by 8 by 30-inch concrete post; bronze tablet stamped "9, 1922"	29.541
Playa del Rey, 2 miles northeast of, 450 feet west of Alla railroad crossing and station; spike in base of trolley pole, painted "U. S. B. M. 13"	12.28
Playa del Rey, 1 mile east of; spike in base of trolley pole 14–6, painted "U. S. 9 B. M."	8.66
Playa del Rey, 150 feet south of Pacific Electric substation 41, on south side of Redondo road, in an 8 by 8 by 30 inch concrete post; bronze tablet stamped "10, 1922"	13.163
Reference mark 14.9 feet southeast of p. b. m. 10, on curb stone; chiseled square	13.73
Playa del Rey, 1.2 miles north of, 1.4 miles south of Venice, at Trolley way and 45th Place; spike in base of trolley pole, painted "U. S. 16 B. M."	15.12

	Feet
Venice, 2,100 feet south of Pacific Electric passenger station, 1,400 feet north of Florence Nightingale school, on Trolley way, one pole north of Avenue 27; spike in base of trolley pole, painted "U. S. 16 B. M."	15.54
Venice, 1,500 feet south of Pacific Electric passenger station, at crossing of Virginia Ave. and Trolley way, 10 feet east of northbound track, on south edge of Virginia Ave., in an 8 by 8 by 30 inch concrete post; bronze tablet stamped "11, 1922"	14.718
From point near southeast corner of Sawtelle quadrangle southwest into Venice 6′ quadrangle	
Culver Junction, 2 miles west of; spike in base of trolley pole, painted "U. S. 45 B. M."	44.91
Reference mark, 27.41 feet north of bench mark 9, 1922, in base of trolley pole; spike	29.59
From Playa del Rey along highways southeast to El Segundo, thence east and northeast along Santa Fe Ry. to Western Ave. crossing, thence along highways east, south, and east to Compton	
Playa del Rey, 150 feet south of Pacific Electric substation 41, on south side of Redondo road, in an 8 by 8 by 30 inch concrete post; bronze tablet stamped "10, 1922"	13.163
Playa del Rey, 0.8 mile south of, on east side of Coast Boulevard; spike in base of telephone pole, painted "U. S. 80 B. M."	79.88
Playa del Rey, 1.6 miles south of, 2.2 miles north of El Segundo, on south side of Coast Boulevard; spike in base of telephone pole, painted "U. S. 119 B. M."	118.96
El Segundo, at north edge of city limits, junction of Coast Boulevard and Collingwood Street, in northwest corner of streets; spike in base of telephone pole, painted "U. S. 105, B. M."	105.00
Reference mark, 144.5 feet west of bronze tablet No. 14, center of Main St. and Grand Ave., in north side of concrete signpost, in light pole; chiseled cross	108.08
El Segundo, 192 feet east of El Segundo State Bank, 108 feet east from end of trolley track, 10 feet north of track, opposite south entrance to El Segundo garage, in an 8 by 8 by 30 inch concrete post; bronze tablet stamped "14, 1922"	104.820
El Segundo, 1 mile east of, along car track from El Segundo to Los Angeles, at Grand Ave. crossing; spike in base of trolley pole, painted "U. S. 115 B. M."	114.95
El Segundo, 1 mile east by 1 mile north of, at intersection of Collingwood and Arizona streets, in southeast corner of streets; spike in base of eucalyptus tree, painted "U. S 120 B. M."	119.50
El Segundo, 2 miles east by 1 mile north of, at crossing of Collingwood St. and Santa Fe Ry., 500 feet south of milepost 13; spike in base of telegraph pole, painted "U. S. 94, B. M."	93.52
El Segundo, 2 miles east by 2 miles north of, 2.2 miles southwest of Inglewood, 540 feet south of milepost 12, on east edge of Santa Fe Ry. right of way; spike in base of telegraph pole, painted "U. S. 94, B. M."	93.77
Inglewood, 1.2 miles southwest of, 2,100 feet north of Orange St., 540 feet southwest of milepost 11, on east edge of Santa Fe Ry. right of way, in an 8 by 8 by 30 inch concrete post; bronze tablet stamped "15, 1922"	103.040

	Feet
Inglewood, 0.4 mile west of, 320 feet west of Cedar Ave. crossing, 65 feet east of switch head, on south side of Santa Fe Ry. track, spike in base of telegraph pole, painted "U. S. 112 B. M."	111.21
Reference mark, 30.5 feet west of bench mark No. 16, 1922, on east edge of concrete sidewalk leading to section house; chiseled cross	114.87
Inglewood, 130 feet west of Santa Fe Ry. passenger station, 60 feet north of main-line track, at southeast corner of fence around section house, in an 8 by 8 by 30 inch concrete post; bronze tablet stamped "16, 1922"	115.328
Inglewood, 1 mile northeast of, at Sentinela Ave. crossing on Santa Fe. Ry., 400 feet west of milepost 9, on east curb of street, 20 feet south of Santa Fe track; chiseled cross, painted "U. S. 154 B. M."	153.27
Florence Ave. railroad crossing, top of east end of guard rail	178.05
Hyde Park, 1 block east of signboard, 2.1 miles northeast of Inglewood, on southwest end of concrete street culvert, 50 feet west of railroad culvert C-8; chiseled cross, U. S. 158 B. M. painted on abutment	157.97
Hyde Park, 1 mile northeast of, on north side of Santa Fe Ry. track, 1 pole west of milepost 7; spike in base of telegraph pole, painted "U. S. 137 B. M."	136.78
Reference mark, 50 feet south of bench mark 17, 1922, in base of power pole 1495.03 E, spike	137.21
Hyde Park, 1.6 miles northeast of, at crossing of Western Ave. and Santa Fe track, on east edge of Western Ave. and north edge of railroad right of way, 13 feet north of center of track, in an 8 by 8 by 30 inch concrete post; bronze tablet stamped "17 ,1922."	137.011
South Vermont Ave. crossing with Santa Fe Ry., 12 feet north of track; chiseled cross on west curb, painted "U. S. 146. B. M."	145.50
South Figueroa St. crossing with Santa Fe Ry., 700 feet east of Slauson siding, 22 feet south of track, on northeast corner of intersection; chiseled cross on curbstone, painted "U. S. 153 B. M."	152.22
Reference mark, 17.2 feet south of bench mark 18, 1922, in southwest corner of South Main St. and Slauson Ave., on curb; chiseled cross	158.41
Intersection of South Main St. and Slauson Ave., in northwest corner of streets, 20 feet west of west curb line of South Main St. and 1½ feet north of north curb line of Slauson Ave., 15 feet south of Santa Fe track, in an 8 by 8 by 30 inch concrete post; bronze tablet stamped, "18, 1922"	158.546
Intersection of South Main and East 69th streets, in southeast corner of streets, opposite fire hydrant; chiseled cross on curb, painted "U. S. 143. B. M."	142.52
Intersection of South Main and West 82d streets, in southwest corner of streets; chiseled cross on curb, painted "U. S. 137 B. M."	136.58
Intersection of South Main and West 91st streets, in southwest corner of streets, opposite fire hydrant; chiseled cross on curb, painted "U. S. 127 B. M."	126.76
Intersection of South Main and 108th streets, in southeast corner of streets, opposite Harbor Boulevard garage, 1½ feet east of east curb line of South Main St. and 10.5 feet south of south curb line of 108th St., in an 8 by 8 by 30 inch concrete post; bronze tablet stamped "19, 1922"	123.754
Reference mark, 7.8 feet north of bench mark 19, 1922, in northeast corner of South Main and 108th streets; chiseled cross	123.48

	Feet
South Park Gardens, 200 feet east of Pacific Electric station, in southeast corner of South Park and Victoria streets; chiseled cross on curb, painted "U. S. 112, B. M."	111.80
Long Beach Bvd. car stop, at crossing of South Compton Ave. and Pacific Electric line, on north side of tracks, opposite passenger shed; spike in base of telegraph pole, painted "U. S. 101 B. M."	100.84
Compton, 2¾ miles north by a quarter of a mile west of, a quarter of a mile west of Southern Pacific R. R., in the south part of Watts, on south side of John St., where street jogs 50 feet south; chiseled cross on curb, painted "U. S. 92 B. M."	91.85
Lynwood, on Southern Pacific R. R., opposite signboard, top of rail	90.0

From El Segundo southeast along highways to Wilmington

El Segundo, 192 feet east of El Segundo State Bank, 108 feet east from end of trolley track, 10 feet north of track, opposite south entrance to El Segundo garage, in an 8 by 8 by 30 inch concrete post; bronze tablet stamped "14, 1922"	104.820
El Segundo, 1 mile west from center of town, at Standard Oil wharf and salt-water pumping station, 50 feet west of Redondo car tracks; chiseled cross on concrete retaining wall, painted "U. S. 24. B. M."	23.22
Pecks Beach, 0.8 mile northwest of Manhattan Beach, opposite beach dance hall, on east side of Redondo car tracks; spike in base of trolley pole, painted "U. S. 27. B. M."	26.43
Reference mark, 23.6 feet north of bench mark 20, 1922; chiseled cross	23.80
Manhattan Beach, on south edge of Center St., 75 feet east from pier abutment, 18 feet east of north-bound car track, 2 feet west of the Strand cement railing, in an 8 by 8 by 30 inch concrete post; bronze tablet stamped "20, 1922"	24.090
Hermosa Beach, 180 feet south of Pacific Electric Hermosa substation 42; spike in base of trolley pole, painted "U. S. 25 B. M.	24.34
Hermosa Beach, in front of City Hall building, opposite entrance to Chamber of Commerce; chiseled cross on curbstone	14.07
Hermosa Beach, in southeast corner of Second St. and Hermosa Ave.; chiseled cross on curbstone, painted "U. S. 14. B. M."	13.20
Reference mark, 18 feet north of bench mark 21, 1922, on concrete retaining wall; chiseled cross	19.04
Redondo Beach, 108 feet north of Santa Fe Ry. passenger station, on city property 25 feet north of city flagpole, on east side of El Paso St., 30 feet east of Santa Fe tracks, in an 8 by 8 by 30 inch concrete post; bronze tablet stamped "21, 1922"	19.481
Redondo Beach, 200 feet south from southwest corner of old Redondo Hotel, on north edge of Ainsworth Court, at top of cement steps leading to ocean, near base of north concrete railing post, set in cement sidewalk; a brass disk marked "City of Redondo Beach bench mark 46.48"	44.577
Redondo Beach, 1 mile south of, on west edge of esplanade; chiseled square on corner of guard post, painted "U. S. 54, B. M."	53.17
Redondo Beach, 2 miles southeast of, on south edge of Redondo to Wilmington highway, at southwest end of railing; spike in guard-rail post, marked "U. S. 111 B. M."	110.31

	Feet
Reference mark, 50 feet north of bench mark, on west side of Redondo-Wilmington road, in base of culvert guard-rail post; spike	115.88
Redondo Beach, 3.4 miles southeast of, on west edge of Redondo to Wilmington highway, 1 foot from fence and 50 feet east of a small highway culvert, in an 8 by 8 by 30 inch concrete post; bronze tablet stamped "22, 1922"	119.039
Redondo Beach, 4.2 miles southeast of, at junction of Redondo to Wilmington highway with T road north; spike in base of telephone pole, painted "U. S. 104 B. M."	103.67
Redondo Beach, 5.3 miles southeast of, on south edge of Redondo to Wilmington highway; spike in base of telephone pole, painted "U. S. 138 B. M."	137.46
Reference mark, 70 feet south of bench mark, in base of telegraph pole; track spike	138.12
Redondo Beach, 6.3 miles southeast of, 4.6 miles west of Wilmington, at junction of Redondo to Wilmington highway and Pennsylvania Ave., in northeast corner of streets, in an 8 by 8 by 30 inch concrete post; bronze tablet stamped "23, 1922"	136.041
Wilmington, 3.6 miles west of, in south corner of Governor Ave. and 258th St.; spike in base of telephone pole, painted "U. S. 82 B. M."	81.49
Wilmington, 2.8 miles west of, at junction of Anaheim St. and San Pedro Boulevard, on southeast abutment of viaduct; chiseled square, U. S. 65 B. M. painted on guard rail	64.75
Wilmington, in northeast corner of Harbor Boulevard and West B St., chiseled square on curb, painted "U. S. B. M. 12–4"	12.33

Primary leveling by H. S. Senseney in 1923

From point near southeast corner of Hollywood quadrangle along highways south to Wilmington

Los Angeles, 30 feet south by 15 feet west of intersection of Western and Florence avenues, center of sewer trap; painted square, marked "U. S. B. M. 153.3"	153.11
Los Angeles, 35 feet east of southeast corner of Western and Manchester avenues, in curb; chiseled square, marked "U. S. B. M. 188.5"	188.33
Los Angeles, at northeast corner of Western Ave. and 99th St., in root of eucalyptus tree; spike, marked "U. S. B. M. 237.6"	237.42
Los Angeles, 35 feet north by 25 feet east of intersection of Western Ave., and 99th St., in concrete post; bronze tablet stamped "A3, 1922"	237.437
Los Angeles, 210 feet north of intersection of Western and Belleview avenues, on east side of Western Ave., in culvert; chiseled square, marked "U. S. B. M. 202.7"	202.56
Los Angeles, at southeast corner of Western and Ballona avenues, in culvert; chiseled square, marked "U. S. B. M. 86.6"	86.44
Los Angeles, at southeast corner of Western and Rosecrans avenues, in culvert; chiseled square, marked "U. S. B. M. 48.7"	48.50
Los Angeles, 65 feet south by 20 feet east of intersection of Western and Rosecrans avenues, in concrete post; bronze tablet stamped "A 4, 1922"	47.070
Los Angeles, on west side of Western Ave. at Los Angeles St., in root of pepper tree; spike, marked "U. S. B. M. 45.9"	45.75

	Feet
Los Angeles, at northeast corner of Western Ave. and Strawberry St., at northwest corner of small bridge, in top of 10 by 10 inch post; nail and washer, marked "U. S. B. M. 28.4"	28.20
Los Angeles, at northwest corner of Western Ave. and 190th St., at east entrance of Southern California Edison Co.'s power station, in southeast corner of concrete step; chiseled square, marked "U. S. B. M. 56.6"	56.39
Los Angeles, at northwest corner of Western Ave. and 190th St., 43 feet south of south entrance of Southern California Edison Co.'s power station, 4½ feet east of gate, on north side of fence, in concrete post; bronze tablet stamped "A 5, 1922"	56.546
Los Angeles, on south side of Torrance Boulevard, 80 feet west of bend in Western Ave., about 600 feet east of overhead electric railroad crossing, in curb at sewer; chiseled square, marked "U. S. B. M. 35.2"	35.06
Los Angeles, at southwest corner of Torrance Boulevard and Normandie Ave., in base of telegraph pole; spike, marked "U. S. B. M. 40.4"	40.24
Los Angeles, at southeast corner of Normandie Ave. and Carson St., in base of telegraph pole; spike, marked "U. S. B. M. 48.4"	48.29
Los Angeles, 40 feet north by 40 feet west of intersection of Normandie Ave. and Carson St., in concrete post; bronze tablet stamped "A 6, 1922"	47.053
Los Angeles, at northwest corner of Normandie and Ocean avenues, in base of telephone pole; spike, marked "U. S. B. M. 47.5"	47.36
Los Angeles, in southwest corner of road forks, about 0.5 mile west of Harbor Boulevard and Lincoln schoolhouse, about 0.7 mile north of Weston St., in base of telephone pole; spike, marked "U. S. B. M. 17.4"	17.25
Los Angeles, 0.4 mile west of Harbor Boulevard, on west side of north and south road, in line with south edge of Weston St., at the feet of the man in Hood tires sign, in stump; spike, marked "U. S. B. M. 39.0"	38.85
Los Angeles, at northeast corner of Harbor Boulevard and Weston St., in base of telephone pole; spike, marked "U. S. B. M. 44.1"	44.00
Los Angeles, 45 feet north by 40 feet east of intersection of Harbor Boulevard and Weston St., in concrete post; bronze tablet stamped "A 7, 1922"	43.823
Wilmington, at southeast corner of Harbor Boulevard and K St., in curb; chiseled square, marked "U. S. B. M. 29.8"	29.67
From Western Ave. east along Rosecrans Ave. to Compton	
Los Angeles, on north side of Rosecrans Ave., 120 feet east of intersection of Vermont Ave., in base of telephone pole; spike, marked "U. S. B. M. 64.0"	63.81
Los Angeles, at southeast corner of Rosecrans Ave. and Harbor Boulevard, in concrete culvert; chiseled square, marked "U. S. B. M. 114.6"	114.37
Los Angeles, at southeast corner of Rosecrans and Central avenues, in root of stump; spike, marked "U. S. B. M. 103.4"	103.18
Los Angeles, 35 feet south by 20 feet west of intersection of Rosecrans and Central avenues, in concrete post; bronze tablet stamped "A 9, 1922"	103.884
Compton, at northeast corner of Main St. and Compton Ave., in base of telephone pole; spike, marked "U. S. B. M. 75.3"	75.09

From Western Ave. west along Rosecrans Ave. to Redondo Ave., thence north to point 2 miles east of El Segundo

	Feet
Los Angeles, at northwest corner of Rosecrans and Cypress avenues, in west end of concrete culvert; chiseled square, marked "U. S. B. M. 49.4"	49.17
Los Angeles, at southeast corner of Rosecrans and Prairie avenues, in base of telephone pole; spike, marked "U. S. B. M. 56.7"	56.48
Los Angeles, on west side of Inglewood Ave., 60 feet north of Rosecrans Ave., in stump; spike, marked "U. S. B. M. 72.7"	72.53
Los Angeles, 20 feet north by 40 feet west of intersection of Rosecrans and Inglewood avenues, in concrete post; bronze tablet, stamped "A 8, 1922"	71.304
Los Angeles, at northwest corner of Rosecrans Ave. and Redondo Boulevard, in concrete culvert; chiseled square, marked "U. S. B. M. 80.4"	80.22
Los Angeles, at southeast corner of Redondo Boulevard and Ballona Ave., in root of eucalyptus tree; spike, marked "U. S. B. M. 93.2"	93.00

From Rosecrans Ave. south along Redondo Ave. to Hermosa Beach

Manhattan Beach, at southwest corner of Redondo Boulevard and Center St., in southeast end of concrete foundation of pump of service station; chiseled square, marked "U. S. B. M. 101.9"	101.71
Manhattan Beach, intersection of Redondo Boulevard and Gould Ave.; top of traffic button	112.45
Manhattan Beach, 35 feet south of intersection of Redondo Boulevard and Gould Ave., 1.6 feet south of curb, 3.2 feet west of lamppost, in concrete post; bronze tablet stamped "A 22, 1923"	112.732
Hermosa Beach, at northeast corner of Pier Ave. and Corona St., in curb; chiseled square, marked "U. S. B. M. 153.9"	153.74
Hermosa Beach, intersection of Second St. and Camino Real; top of traffic button	87.64

From Thenard Junction along highways east and north to point 4 miles south by 1.5 miles west of Artesia

U. S. Coast and Geodetic Survey bench mark "G 33"	32.812
Long Beach, 1 mile west of, on north side of Anaheim St., 80 feet west of Southern Pacific R. R. crossing, in base of telephone pole; spike, marked "U. S. B. M. 8.7"	8.76
Long Beach, on north side of Anaheim St., opposite southwest corner of Mountain View Dairy, in curb; chiseled square, marked "U. S. B. M. 10.4"	10.41
Long Beach, 25 feet north by 50 feet west of intersection of Anaheim St. and Atlantic Ave., in concrete post; bronze tablet stamped "A 10, 1923"	36.259
Long Beach, at southwest corner of Anaheim St. and Olive Ave., 3 feet west of telegraph pole, in curb; chiseled square	35.14
Long Beach, at southeast corner of Anaheim and Cherry streets, at telephone pole in curb; chiseled square, marked "U. S. B. M. 30.2"	30.32
Long Beach, at southeast corner of Anaheim St. and Loma Ave., at fire hydrant, in curb; chiseled square, marked "U. S. B. M. 38.6"	38.73

	Feet
Long Beach, half a mile east of, on north side of Anaheim St., 40 feet east of private road north, opposite Long Beach Golf Club, in root of pepper tree; copper nail and washer, marked "U. S. B. M. 57.9"	58.06
Long Beach, 1 mile east of, on north side of Anaheim St., 40 feet west of private road north to Bryant ranch, in concrete post; bronze tablet stamped "A 11, 1923"	54.828
Long Beach, 2 miles east of, on south side of Anaheim St., 70 feet west of Palos Verde Ave., in root of pepper tree; copper nail and washer, marked "U. S. B. M. 60.0"	60.15
Long Beach, 3 miles northeast of, at northeast corner of crossroads at Bixby schoolhouse, in base of telephone pole; spike, marked "U. S. B. M. 14.9"	15.06
Artesia, 4 miles south by 1½ miles west of, 3½ miles east of Signal Hill, at southeast corner of Palos Verde and Los Alamitos roads, in base of telephone pole; spike, marked "U. S. B. M. 23.2"	23.32

From Norwalk west along highways to Compton

Norwalk, at southwest corner of San Diego road and La Mirada Ave., in base of telephone pole; spike, marked "U. S. B. M. 86.8"	86.83
Norwalk, 0.5 mile south by 1.5 miles west of, at southwest corner of La Mirada and Gallina avenues, in base of telephone pole; spike, marked "U. S. B. M. 85.6"	85.62
San Gabriel River; floor of bridge	92.5
San Gabriel River; surface of water Dec. 18, 1922, at 1.30 p. m	82.3
Norwalk, 0.5 mile south by 2.5 miles west of, 150 feet south of intersection of La Mirada and Woodruff avenues, on west side of road, in base of telephone pole; spike, marked "U. S. B. M. 85.3"	85.29
Norwalk, 0.5 mile south by 2.5 miles west of, 35 feet south by 25 feet east of intersection of La Mirada and Woodruff avenues, in concrete post; bronze tablet stamped "A 10, 1922"	85.163
Norwalk, 1 mile south by 2½ miles west of, 2½ miles east of Clearwater, at southwest corner of Center Boulevard and Woodruff Ave., in base of telephone pole; spike, marked "U. S. B. M. 74"	74.76
Clearwater, 1½ miles east of, at southwest corner of Center Boulevard and Clark Ave., in concrete culvert; chiseled square, marked "U. S. B. M. 70.9"	70.90
Clearwater, half a mile east of, at northwest corner of Center Boulevard and New York Ave., in concrete culvert; chiseled square, marked "U. S. B. M. 68.8"	68.80
Clearwater, at southwest corner of Center Boulevard and Ocean Ave., in northwest corner of concrete step of Literary Hall; chiseled square	70.30
Clearwater, at southwest corner of Center Boulevard and Ocean Ave., 5½ feet west of northeast corner of Literary Hall, in concrete post; bronze tablet stamped "A 11, 1922"	69.576
Clearwater, intersection of Ocean Ave. and Washington Boulevard; top of traffic button	74.8
Clearwater, half a mile west of, at northeast corner of Washington Boulevard and Michigan Ave., in concrete culvert; chiseled square, marked "U. S. B. M. 71.0"	70.96
Los Angeles River; floor of bridge	72.3
Los Angeles River; surface of water Dec. 19, 1922, at noon	62.1

	Feet
Clearwater, 1½ miles west of, 1 mile east of Compton, 300 feet west of west end of bridge over Los Angeles River, at northeast corner of Washington Boulevard and Gibson Ave., in concrete culvert; chiseled square, marked "U. S. B. M. 69.7"	69.58
Compton, at southeast corner of Long Beach Boulevard and Main St., in northeast end of concrete foundation of pump at Service station, chiseled square (not marked)	69.92

From point near northeast corner of Clearwater 6′ quadrangle along highways south and west near border of that quadrangle to Cerritos

NOTE.—The first 3 miles of this line was releveled on account of an error of 0.3 foot distributed therein.

San Gabriel River; floor of bridge	86.7
San Gabriel River; surface of water Jan. 3, 1923, at 9.30 a. m	72.7
Artesia, 1½ miles north by 1 mile west of, at northwest corner of Center Boulevard and Gallina Ave., in concrete culvert; chiseled square, marked "U. S. B. M. 76. 4"	76.55
Artesia, half a mile north by 1 mile west of, at northwest corner of Gallina and Artesia avenues, in concrete culvert; chiseled square, marked "U. S. B. M. 63.0"	63.19
Artesia, 1 mile west by half a mile south of, at northwest corner of Gallina Ave. and First St., in root of tree; copper nail and washer, marked "U. S. B. M. 52.9"	53.10
Artesia, 1 mile west by half a mile south of, 20 feet north by 20 feet west of intersection of Gallina Ave. and First St., in concrete post; bronze tablet stamped "A 1, 1923"	53.144
San Gabriel River; floor of bridge	59.9
San Gabriel River; surface of water Jan. 3, 1923, at 2 p. m	53.3
Artesia, 1½ miles west by half a mile south of, at northwest corner of Palos Verdes Ave. and First St., in base of telephone pole; spike marked "U. S. B. M. 53.1"	53.27
Artesia, 1½ miles west by 1½ miles south of, on Palo Verde road, 1 mile north of Bixby road, at southwest corner of T road west, in base of fence post; spike, marked "U. S. B. M. 48.0"	48.13
Artesia, 2½ miles south by 1½ miles west of, 25 feet south by 25 feet west of intersection of Bixby and Palos Verdes roads, in concrete post; bronze tablet stamped "A 2, 1923" (no reference mark)	37.107
Artesia, 4 miles south by 1½ miles west of, 3½ miles east of Signal Hill, at southeast corner of Palos Verdes and Los Alamitos roads, in base of telephone pole; spike, marked "U. S. B. M. 23.2"	23.32
230 feet south of bench mark above, is spike in telephone pole, marked "U. S. B. M. 21.9"	21.97
Signal Hill, 2½ miles east of, on Los Alamitos road, at northwest corner of road north to Bellflower, in base of telephone pole; spike, marked "U. S. B. M. 23.7"	23.81
Signal Hill, 1¼ miles east of, on Los Alamitos road, 50 feet east by 25 feet south of T road south, in concrete post; bronze tablet stamped "A 3, 1923"	28.847
95 feet west of bench mark A 3, at southeast corner of bridge; top of bolthead painted white	30.74
Signal Hill, 0.5 mile east of, on south side of Los Alamitos road, at bend in road, in base of telephone pole; spike, marked "U. S. B. M. 51.0"	51.11

	Feet
Signal Hill, on west side of Cherry St., 120 feet north of Union Pacific R. R. crossing, in base of telephone pole; spike, marked "U. S. B. M. 60.8"	60.91
Bixby Heights, at northeast corner of Long Beach Boulevard and Wardlow road, 17.9 feet southeast of telephone pole, in curb; chiseled square	91.10
Bixby Heights, 20 feet north by 50 feet east of intersection of Long Beach Boulevard and Wardlow road, 1 foot north of curb, in concrete post; bronze tablet stamped "A 4, 1923"	91.070
Bixby Heights, at Long Beach Boulevard and American Ave., opposite south end of service station, in curb; chiseled square, marked "U. S. B. M. 111.4"	111.54
Cerritos, 1 mile east of, at northwest corner of bridge over Los Angeles River; top of bolthead painted white, marked "U. S. B. M. 40.8"	40.97
Cerritos; surface of water under bridge, Jan. 6, 1923, 10 a. m.	29.8
Cerritos, 35 feet north of northwest corner of Dominguez schoolhouse, in root of tree; copper nail and washer, marked "U. S. B. M. 33.2"	33.39

From Carmenita west along highways to point 1 mile west of Artesia. Leveled twice for first 3.6 miles

Artesia, half a mile north by 3 miles east of, at northwest corner of Artesia Ave. and north and south road, at Los Angeles-Orange county corner, in base of telegraph pole; spike, marked "U. S. B. M. 57.1"	57.07
Artesia, half mile north by 2 miles east of, at southwest corner of Artesia and Carmenita avenues, in top of stump; copper nail and washer, marked "U. S. B. M. 62.2"	62.15
Artesia, half a mile south by 2 miles east of, 45 feet north by 25 feet east of intersection of Carmenita Ave. and First St., in concrete post; bronze tablet stamped "A 5, 1923"	46.635
Artesia, 360 feet west of bench mark A 5, on north side of road, in top of eucalyptus stump; copper nail and washer	47.85
Artesia, half a mile south by 1 mile east of, at northeast corner of Bloomfield Ave. and First St., in base of telephone pole; spike, marked "U. S. B. M. 47.5"	47.34
Artesia, at northwest corner of First and Main streets, in curb; chiseled square, marked "U. S. B. M. 48.6"	48.86

From Norwalk south along highways to point 1 mile east of Artesia

Artesia, 1½ miles north by 1 mile east of, at northwest corner of Bloomfield Ave. and Center Boulevard, in concrete culvert; chiseled square, marked "U. S. B. M. 73.3"	73.17
Artesia, half a mile north by 1 mile east of, at northwest corner of Bloomfield Ave. and Artesia St., in base of telegraph pole; spike, marked "U. S. B. M. 58.8"	58.74

From point 1 mile east of Artesia along highways south and west to point near southeast corner of Clearwater 6′ quadrangle

Artesia, 1½ miles south by 1 mile east of, at southwest corner of Bloomfield Ave. and Anaheim St., in root of eucalyptus tree; copper nail and washer, marked "U. S. B. M. 44.0"	43.89

	Feet
Artesia, 2½ miles south by 1 mile east of, 15 feet north by 30 feet west of intersection of Bloomfield and Lincoln avenues, in concrete post; bronze tablet, stamped "A 6, 1923"	34.625
Reference mark, 40 feet north of bench mark A 6, in top of stump; copper nail and washer	35.39
Artesia, half a mile east by 2½ miles south of, at southwest corner of Artesia-Los Alamitos Boulevard and Lincoln Ave., in north end of curb; chiseled square, marked "U. S. B. M. 32.4"	32.21
Artesia, half a mile east by 3½ miles south of, half a mile north of Los Alamitos, at northwest corner of bridge over Coyote Creek; chiseled square, marked "U. S. B. M. 32.4"	32.16
Los Alamitos, 0.8 mile west of, northwest corner of T road north, on southwest corner of wooden culvert; top of bolthead painted white, marked "U. S. B. M. 24.5"	24.23

From Studebaker north along highways to northwest corner of Whittier 6′ quadrangle

Studebaker, 1.1 miles north of, at northeast corner of T road east, about 0.1 mile south of San Gabriel River, in concrete culvert; chiseled square, marked "U. S. B. M. 122.7"	122.74
Studebaker, 1.1 miles north by 0.5 mile east of, at northeast corner of Little Lake and Day and Orr roads, in base of telephone pole; spike, marked "U. S. B. M. 124.9"	124.94
Studebaker, 2 miles north by 0.5 mile east of, at southeast corner of Telegraph and Day and Orr roads, in root of tree, copper nail and washer, marked "U. S. B. M. 136.8"	136.74
San Gabriel River; floor of bridge over (surface of water Dec. 21, 1922, 126.0)	143.5
Studebaker, 2½ miles north of, 1½ miles south of Rivera, on south side of Telegraph road at Passons Boulevard, in base of telegraph pole; spike, marked "U. S. B. M. 143.4"	143.37
Studebaker, 2½ miles north of, 1½ miles south of Rivera, 65 feet north by 15 feet west of intersection of Telegraph road and Passons Boulevard, in concrete post; bronze tablet stamped "A 13, 1922"	142.739
Rivera, on east side of Passons Boulevard, 40 feet south of Atchison, Topeka & Santa Fe Ry., in northwest corner of concrete irrigation ditch; chiseled square, marked "U. S. B. M. 157.7"	157.70
Rivera, 1 mile northeast of, on east side of Passons Boulevard, on south end of concrete irrigation ditch; chiseled square, marked "U. S. B. M. 165.7"	165.66
Rivera, 1½ miles northeast of, at northeast corner of crossroads at Ranchito, in concrete irrigation ditch; chiseled square, marked "U. S. B. M. 170.3"	170.29
Rivera, 1½ miles northeast of, at northwest corner of crossroads at Ranchito, 6 feet west of southeast corner of Pio Pico Woman's Club, in concrete post; bronze tablet stamped "A 14, 1922"	169.560
Ranchito, 0.7 mile northeast of, at northeast corner of Whittier and Passons boulevards, 6.3 feet north of south end of concrete irrigation ditch; chiseled square, marked "U. S. B. M. 181.3"	181.37

From northwest corner of Whittier 6′ quadrangle along highways southeast 5.4 miles, thence south to La Mirada

	Feet
San Gabriel River; water surface at 9 a. m., Jan. 10, 1923	172.2
Whittier, 1 mile northwest of, at northwest corner of Whittier Boulevard and Judson road, in curb; chiseled square, marked "U. S. B. M. 178.7"	178.76
Whittier, at northwest corner of Whittier Boulevard and Magnolia St., in curb; chiseled square, marked "U. S. B. M. 236.9"	237.01
Whittier, on south side of Whittier Boulevard, 80 feet east of Kings Lane, in curb; chiseled square	214.78
Whittier, on south side of Whittier Boulevard, 15 feet east of Kings Lane, in concrete post; bronze tablet stamped "A 7, 1923"	215.015
Whittier, 1 mile southeast of, on north side of Whittier Boulevard, 210 feet east of Michigan Ave., at northwest corner of concrete culvert; chiseled square, marked "U. S. B. M. 235.4"	235.53
Whittier, 1.8 miles southeast of, at southeast corner of Whittier Boulevard and Gunn road, at telephone pole, in curb; chiseled square, marked "U. S. B. M. 265.9"	266.08
Whittier, 2.4 miles southwest of, on north side of Whittier Boulevard at Colima road, in concrete base of property post; chiseled square	265.14
Whittier, 2.4 miles southeast of, on north side of Whittier Boulevard, 12 feet east of Colima road, in concrete post; bronze tablet stamped "A 8, 1923"	265.594
Whittier, 3.4 miles southeast of, at southwest corner of Colima road and Mulberry St., in concrete base of electric warning signal; chiseled square, marked "U. S. B. M. 1804"	180.61
Whittier, 4.3 miles southeast of, 2.2 miles north of La Mirada, on south side of La Mirada road at Colima road, on bank 5.7 feet east of telephone pole, in concrete base of property corner; chiseled square, marked U. S. B. M. 193.9"	194.11
La Mirada, 1½ miles north of, on Valley View Ave., at northwest corner of crossroads, in base of telephone pole; spike, marked "U.S.B.M. 119.0"	119.19
La Mirada, 1½ miles north of, on Valley View Ave., 30 feet south by 25 feet west of intersection of crossroads, in concrete post; bronze tablet stamped "A 9, 1923"	119.765
La Mirada, 1 mile north of, on Valley View Ave., at northwest corner of T road west, in telephone pole; spike, marked "U. S. B. M. 96.1"	96.34
La Mirada, 0.3 mile northwest of, at northeast corner of Norwalk-La Mirada road and Valley View Ave., in concrete culvert; chiseled square, marked "U. S. B. M. 96.4"	96.64
La Mirada, half a mile south of, 10 feet north by 23 feet east of intersection of Center Boulevard and Valley View Ave., in north edge of concrete road, in line with telegraph poles; chiseled square marked "U. S. B. M. 67.8"	68.10

Near Carmenita

U. S. Coast and Geodetic Survey bench mark "S 33"	94.203
Carmenita, half a mile northwest of, at northeast corner of Southern Pacific R. R. culvert "500 E"; top of bolthead painted white, marked "U. S. B. M. 77.5"	77.51

	Feet
Carmenita, half a mile southeast of, in southeast corner of Southern Pacific R. R. culvert "501 B"; chiseled square, marked "U. S. B. M. 68.3"	68.42
U. S. Coast and Geodetic Survey bench mark "T 33"	61.644

From point near Bellflower along highways west and south through Clearwater 6′ quadrangle to Signal Hill

Bellflower, 1.5 miles south by 0.5 mile west of, 1.5 miles east of Hynes pumping station, at southwest corner of crossroad, in telephone pole; railroad spike, marked "U. S. B. M. 54.2"	54.46
Bellflower, 1.5 miles south by 2 miles west of, 100 feet southeast of southeast corner of Hynes pumping station, in telephone pole; railroad spike, marked "U. S. B. M. 50.2"	50.49
Bellflower, 1.5 miles south by 2 miles west of, 43 feet northeast of northeast corner of superintendent's office at Hynes pumping station, in concrete post; bronze tablet stamped "S. 50 1923"	51.141
Hynes, 2 miles south of, 150 feet west of Ocean Ave., on north side of highway, in pipe filled with concrete; top of nail, marked "U. S. B. M. 53.3"	53.63
Signal Hill, 3.5 miles north of, at northwest corner of Cherry Ave. and Washington St., in concrete culvert; chiseled square, marked "U. S. B. M. 49.4"	49.76
Signal Hill, 3 miles north of, on east side of Cherry Ave., at the "Downey-Whittier cut-off"; top of nail in concrete culvert, marked "U. S. B. M. 59.8"	60.12
Signal Hill, 3 miles north of, on east side of Cherry Ave., 80 feet south of "Downey-Whittier cut-off," in concrete post; bronze tablet stamped "S 51 1923"	60.762
Signal Hill, 2 miles north of, at southwest corner of Cherry Ave. and Bixby Road, in concrete culvert; chiseled square, marked "U. S. B. M. 64.6"	65.02

From Signal Hill south along highways through Clearwater and Long Beach quadrangles to Long Beach

Burnett, 75 feet north of station, west side of Union Pacific R. R. track, in base of warning signal; chiseled square	48.94
Burnett, at northwest corner of building occupied by Burnett post office, in concrete post; bronze tablet stamped "S. 52 1923"	49.011
Long Beach, at northeast corner of State and California streets, at telephone pole, in curb; chiseled square	26.39

DEGREE QUADRANGLE 34°–35°, 114°–115°

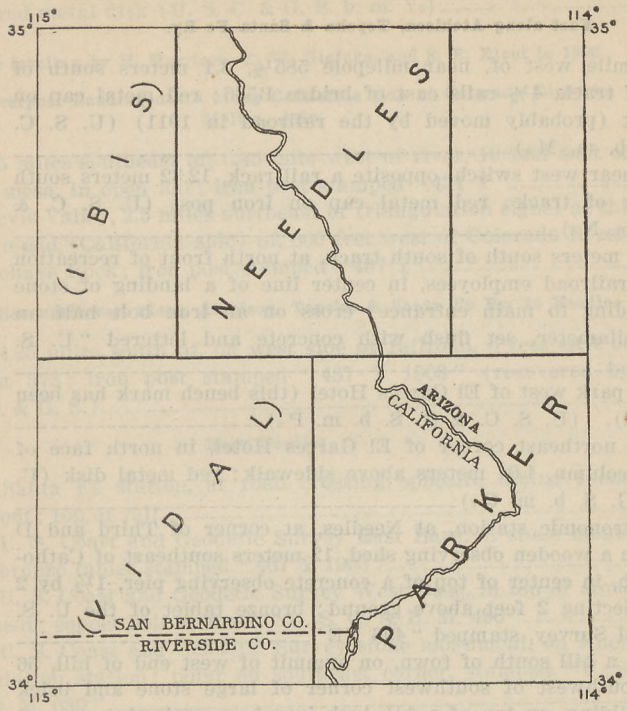


FIGURE 10.—Diagram of degree quadrangle 34°–35°, 114°–115°

IBIS QUADRANGLE

[Latitude 34° 30′–35°; longitude 114° 45′–115°]

SAN BERNARDINO COUNTY

Precise leveling by U. S. Coast and Geodetic Survey

East along Atchison, Topeka & Santa Fe Ry.

	Feet
Homer, about 1.5 miles east of, opposite first pole west of milepole 600, 17.3 meters north of center of track of Atchison, Topeka & Santa Fe Ry., 1.3 meters from east post of a rail rack; red metal cap on iron post (U. S. C. & G. S. b. m. J_6)	2,002.578
Ibis, 33.33 meters south of Atchison, Topeka & Santa Fe Ry. station, 26.57 meters south of center of main track, 23.17 meters west of a small storehouse belonging to a mining company; red metal cap on iron post (U. S. C. & G. S. b. m. K_6)	1,453.790
Java, 3 miles west of, 2 poles east of milepole 588, 3.09 meters south of center of track of Atchison, Topeka & Santa Fe Ry.; in surface of concrete retaining wall at south end of east abutment of bridge D588; copper bolt (probably moved by the railroad in 1911) (U. S. C. & G. S. b. m. L_6)	1,141.083

NEEDLES QUADRANGLE

SAN BERNARDINO COUNTY

Precise leveling by U. S. Coast and Geodetic Survey

East along Atchison, Topeka & Santa Fe Ry.

	Feet
Java, 0.5 mile west of, near milepole 585½, 3.1 meters south of center of track, 4½ rails east of bridge B586; red metal cap on iron post (probably moved by the railroad in 1911) (U. S. C. & G. S. b. m. M_6)	981.553
Hartoum, near west switch, opposite a rail rack, 12.32 meters south of center of track; red metal cap on iron post (U. S. C. & G. S. b. m. N_6)	740.235
Needles, 58 meters south of south track, at north front of recreation hall for railroad employees, in center line of a landing of stone steps leading to main entrance; cross on an iron bolt half an inch in diameter, set flush with concrete and lettered "U. S. B. M."	482.653
Needles, in park west of El Garces Hotel (this bench mark has been destroyed). (U. S. C. & G. S. b. m. P_6)	484.166
Needles, at northeast corner of El Garces Hotel, in north face of concrete column, 1.04 meters above sidewalk; red metal disk (U. S. C. & G. S. b. m. Q_6)	487.916
Needles astronomic station, at Needles, at corner of Third and D streets, in a wooden observing shed, 12 meters southeast of Catholic church, in center of top of a concrete observing pier, 1½ by 2 feet, projecting 2 feet above ground; bronze tablet of the U. S. Geological Survey, stamped "496 NE"	503.506
Needles, on a hill south of town, on summit of west end of hill, 56 meters southwest of southwest corner of large stone and brick school building, on top of a 1½ inch iron bar, projecting several inches from top of a concrete pier, 1 by 1½ feet, standing 2 feet above ground; cross mark (probably destroyed) (U. S. C. & G. S. b. m. Bar)	552.361
Needles, 5 miles south of, 7 poles south of milepole 573, 5.07 meters east of center of track, in coping stone at northeast corner of masonry culvert C574; copper bolt (U. S. C. & G. S. b. m. R_6)	475.832
Needles, 5 miles south of, 1.65 meters from milepole 573, 11.6 meters west of center of railroad track; bronze cap riveted on iron post (U. S. G. S. b. m. 473)	473.992
Needles, 5 miles south of, 1 pole south of milepole 573, in east end of north abutment of bridge 1573, 4.42 meters east of center of track, 10 centimeters from face of coping; red metal disk (U. S. C. & G. S. b. m. S_6)	468.805
Beal, 3 miles south of, 2 poles south of milepole 569, 5.58 meters west of center of track, in west end of north abutment of bridge E569, 30 centimeters from face and 30 centimeters from end of coping; copper bolt (U. S. C. & G. S. b. m. T_6)	462.758
Beal, 5 miles south of, 4½ poles south of milepole 567, in coping at northeast corner of bridge C567 of Atchison, Topeka & Santa Fe Ry., 4.34 meters east of center of track, 53 centimeters from face of coping; copper bolt (U. S. C. & G. S. b. m. U_6)	474.697

	Feet
Beal, about 5½ miles south of, in coping stone at northwest corner of large steel cantilever bridge of Atchison, Topeka & Santa Fe Ry. over Colorado River, 2.24 meters north of center of track, 2.78 meters from north side and 50 centimeters from east side of coping stone; red metal disk (U. S. C. & G. S. b. m. V6)	504.520

Primary leveling by H. Morrison, E. W. Glafcke, and S. E. Blout in 1902

From Liverpool Landing north along California side of Colorado River to Mellen, Ariz.

Mellen, 15 miles southeast of, 0.45 mile west of river, 10 feet east of foot of mesa, in open flat; iron post stamped "431 Y"	431.547
Chemehuevis Valley, 2.5 miles northeast of triangulation signal at the northern end (California side) of, 600 feet west of Colorado River, near Mohave Rock; iron post stamped "437 Y"	438.060

From Mellen northwest along Atchison, Topeka & Santa Fe Ry. to Needles

Needles, 4.25 miles south of, on west side of railroad, 6 feet east of milepost 373; iron post stamped "437 Y 1903" (recovered by U. S. C. & G. S.)	473.992

Near Needles

Needles, Santa Fe station, at road crossing opposite dining room, west front; top of rail	481.520
Needles, U. S. Coast and Geodetic Survey East Base, in stone monument; bronze tablet stamped "467 Y 1903"	467.166
Needles, U. S. Coast and Geodetic Survey West Base, in top of stone monument; copper bolt stamped "U. S. G. S. B. M. 490"	490.956
Needles, U. S. Coast and Geodetic Survey stone monument, on Knoll triangulation station; point on southeast corner, stamped "U. S. G. S. B. M. 680"	680.131
Needles, west corner of schoolhouse grounds, in top of concrete monument; iron pipe stamped "552 Y 1903" (by U. S. C. & G. S.)	552.364
Needles, U. S. Coast and Geodetic Survey monument in Catholic churchyard; bronze tablet stamped "503 Y 1903" (by U. S. C. & G. S.)	503.506

From Needles north 9 miles (part of circuit to Fort Mohave)

Needles, 3 miles northwest of, in sec. 13, T. 9 N., R. 22 E., on west side of road west of river; iron post stamped "482 Y"	482.368
Needles, 8 miles northwest of, in sec. 22, T. 9 N., R. 22 E., on east side of road west of river; iron post stamped "488 Y"	488.339

From Needles south along road to West Well

Needles, 5 miles south of, in sec. 20, T. 8 N., R. 23 E., on east side of road leading to Parker; iron post stamped "737 Y"	737.991
Needles, 10 miles south of, in sec. 7, T. 7 N., R. 23 E., on east side of road leading to Parker; iron post stamped "1215 Y"	1,215.367
Needles, 15 miles south of, on west side of road leading to Parker; iron post stamped "1933 Y"	1,934.152
Needles, 20 miles south of, on west side of road leading to Parker; iron post stamped "1906 Y"	1,906.584
Needles, 25 miles south of, 8 miles northwest of West Well, on west side of road; iron post stamped "1613 Y"	1,613.262

From Needles northwest along Atchison, Topeka & Santa Fe Ry. to Klinefelt

	Feet
Java, 7 miles northwest of Needles, 80 feet east of section house at Java station; iron post stamped "968 Y"	969.042
Klinefelt station, west side of track, opposite station signboard; iron post stamped "1213 Y"	1,213.288

PARKER QUADRANGLE

[Latitude 34°–34° 30′; longitude 114°–114° 30′]

RIVERSIDE AND SAN BERNARDINO COUNTIES

Primary leveling by E. W. Glafcke and S. E. Blout in 1902–3

Northeast along road to point opposite Bill Williams Fork, thence northwest along road to Liverpool Landing

	Feet
Parker, 13.5 miles southwest of, 0.5 mile west of river landing of Right & Lawrence Mining Co., 1.5 miles east of Riverside Mountain, top of mesa, in large boulder set in ground; bronze tablet stamped "405 Y"	405.380
Parker, 8 miles southwest of, 0.25 mile west of river, opposite center of large island, at head of big draw, on mesa; iron post stamped "415 Y"	415.918
Parker, 3.5 miles west of, 600 feet west of river, 400 feet due west of triangulation point, top of mesa, on edge of same; iron post stamped "410 Y"	410.731
Bill Williams Fork, 15.1 miles south of, 200 feet west of river, on east slope of mesa, 100 feet west of trail; iron post stamped "372 Y"	372.863
Bill Williams Fork, 10 miles south of, at lower end of Empire Flats, 700 feet west of river, 600 feet east of mesa, in open flat; iron post stamped "370 Y"	370.865
Bill Williams Fork, 4.6 miles south of, 800 feet west of big bend in river at point in cliffs, lower end of Empire Flats (California side), in saddle; iron post stamped "412 Y"	412.458
Bill Williams Fork, 1,200 feet due west of mouth of, 60 feet west of river,, on west bank, on large mound of rock, in ledge at foot of cliffs; bronze tablet stamped "400 Y"	401.010
Pete McGuire, 300 feet north of (California side of river); iron post stamped "401 Y"	402.308
Mellen, Ariz., 35 miles southeast of, 2.45 miles south of Tom Drennis's stamp mill, 300 feet west of river, on east slope of mesa, in boulder; bronze tablet stamped "414 Y"	415.330
Mellen, 30 miles southeast of, on west bank (California side) of river; bronze tablet stamped "417 Y"	417.619
Chemehuevis Valley, lower end of, west bank of river, on point of mesa; iron post stamped "437 Y"	438.036

From Liverpool Landing southwest to West Well

West Well, in Chemehuevis Valley, on east side of road to Parker, 50 feet north of pump; iron post stamped "762 Y"	762.309

From point 11 miles south of West Well southeast to Parker, Ariz.

West Well, 11 miles south of, on west side of road, on summit of mountain; iron post stamped "1888 Y"	1,888.439

	Feet
West Well, 15 miles south of, on west side of road; iron post stamped "1402 Y"	1,402.097
West Well, 21 miles south of, 5 miles west of Colorado River at point opposite Parker, on east side of road; iron post stamped "849 Y"	848.520

VIDAL QUADRANGLE

[Latitude 34°–34° 30′; longitude 114°–114° 30′]

RIVERSIDE AND SAN BERNARDINO COUNTIES

Primary leveling by S. E. Blout in 1903

From Needles to West Well, thence 11 miles south

	Feet
West Well, 3 miles northwest of, on west side of road; iron post stamped "1048 Y"	1,048.925
West Well, 5 miles southwest of, on east side of road; iron post stamped "1232 Y"	1,233.121

DEGREE QUADRANGLE 34°–35°, 115°–116°

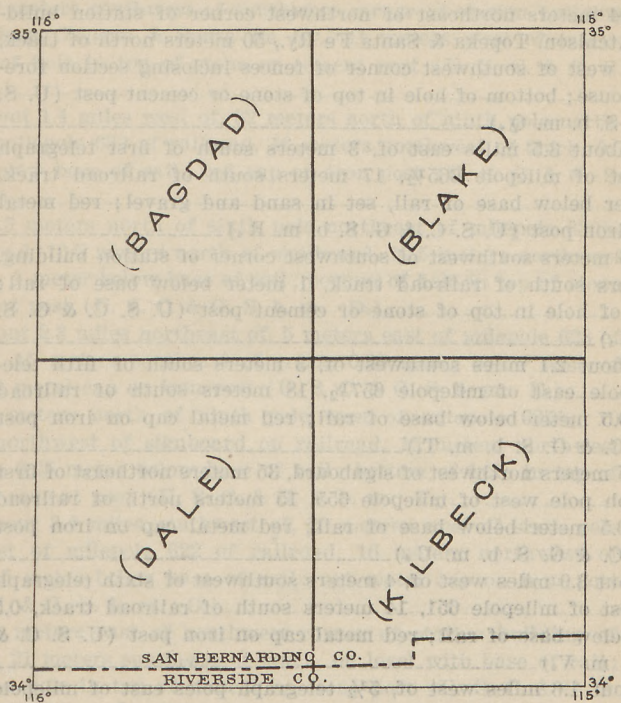


FIGURE 11.—Diagram of degree quadrangle 34°–35°, 115°–116°

BAGDAD QUADRANGLE

[Latitude 34° 30′–35°; longitude 115° 30′–116°]

SAN BERNARDINO COUNTY

Precise leveling by U. S. Coast and Geodetic Survey

From Siberia east along Atchison, Topeka & Santa Fe Ry. to Cadiz

	Feet
Siberia, 5 meters southwest of signboard "Siberia," 15 meters northwest of seventh telegraph pole northwest of milepole 676½, 11 meters south of Atchison, Topeka & Santa Fe Ry. track; bottom of hole in top of stone or cement post (U. S. C. & G. S. b. m. M_4)	1,276.599
Siberia, about 1.75 miles east of, 50 meters northwest of third telegraph pole southwest of milepole 698½, 17 meters north of railroad track, 0.5 meter below base of rail, set in sand and gravel; red metal cap on iron post (U. S. C. & G. S. b. m. N_4)	1,107.354

Feet

Nome, 10 meters northeast of signboard, 35 meters north of second telegraph pole east of milepole 673, 15 meters east of railroad track, 0.5 meter below base of rail; bottom of hole in top of stone or cement post (U. S. C. & G. S. b. m. O_4) ---------- 1,003.069

Nome, about 1.75 miles east of, 3 meters southwest of fourth telegraph pole west of milepole 671, 17 meters south of railroad track, 1.25 meters below base of rail; red metal cap on iron post (U. S. C. & G. S. b. m. P_4) ---------- 895.972

Bagdad, 44 meters northeast of northwest corner of station building of Atchison, Topeka & Santa Fe Ry., 50 meters north of track, 1 meter west of southwest corner of fences inclosing section foreman's house; bottom of hole in top of stone or cement post (U. S. C. & G. S. b. m. Q_4) ---------- 791.052

Bagdad, about 3.5 miles east of, 3 meters south of first telegraph pole east of milepole 665½, 17 meters south of railroad track, 0.5 meter below base of rail, set in sand and gravel; red metal cap on iron post (U. S. C. & G. S. b. m. R_4) ---------- 730.471

Amboy, 35 meters southwest of southwest corner of station building, 17 meters south of railroad track, 1 meter below base of rail; bottom of hole in top of stone or cement post (U. S. C. & G. S. b. m. S_4) ---------- 611.403

Bengal, about 2.1 miles southwest of, 3 meters south of fifth telegraph pole east of milepole 657½, 18 meters south of railroad track, 0.5 meter below base of rail; red metal cap on iron post (U. S. C. & G. S. b. m. T_4) ---------- 674.490

Bengal, 85 meters northwest of signboard, 35 meters northeast of first telegraph pole west of milepole 655, 15 meters north of railroad track, 0.5 meter below base of rail; red metal cap on iron post (U. S. C. & G. S. b. m. U_4) ---------- 709.109

Cadiz, about 3.9 miles west of, 4 meters southwest of sixth telegraph pole west of milepole 651, 14 meters south of railroad track, 0.5 meter below base of rail; red metal cap on iron post (U. S. C. & G. S. b. m. V_4) ---------- 677.453

Cadiz, about 1.6 miles west of, 5½ telegraph poles east of milepole 649, 3 meters north of railroad track, ⅔ meter below base of rail, in top of north red sandstone coping of bridge 649B; bottom of hole in horizontal surface (U. S. C. & G. S. b. m. W.) ---------- 759.661

Cadiz, 9 meters northeast of signboard, 37 meters northwest of ninth telegraph pole east of milepost 647½, 12 meters north of railroad track, 0.5 meter below base of rail; bottom of hole in stone or cement post (U. S. C. & G. S. b. m. X_4) ---------- 818.892

BLAKE QUADRANGLE

[Latitude 34° 30′–35°; longitude 115°–115° 30′]

SAN BERNARDINO COUNTY

Precise leveling by U. S. Coast and Geodetic Survey

From Siam northeast along Atchison, Topeka & Santa Fe Ry., to Vontrigger

Feet

Siam, about 2.1 miles southwest of, 23 meters northeast of milepole 644, 17 meters southeast of Atchison, Topeka & Santa Fe Ry. track, 0.5 meter below base of rail; red metal cap on iron post (U. S. C. & G. S. b. m. Y_4) ---------- 955.641

Feet

Siam, 5.5 meters east of seventh pole northeast of milepole 642, 25 meters southeast of signboard, 18 meters southeast of Atchison, Topeka & Santa Fe Ry. track; bottom of hole in top of cement or stone post (U. S. C. & G. S. b. m. Z_5) ---------- 1,037.711

Danby, about 2.25 miles southwest of, 7 meters south of seventh pole northeast of milepole 638½, 12.5 meters southeast of railroad track, 0.25 meter below base of rail; red metal cap on iron post (U. S. C. & G. S. b. m. A_5) ---------- 1,183.724

Danby, 80 meters southwest of southwest corner of station building of Atchison, Topeka & Santa Fe Ry., 41 meters west of track; bottom of hole in top of stone or cement post (U. S. C. & G. S. b. m. B_5) ---------- 1,352.087

Arimo, about 1.4 miles west of, 32 meters north of ninth pole northeast of milepole 632 of railroad, 16 meters northwest of track, 0.5 meter below base of rail; red cap on iron post (U. S. C. & G. S. b. m. C_5) ---------- 1,472.060

Arimo, 39.5 meters north of sixth pole northeast of milepole 630½ of railroad, 10.5 meters north of signboard, 19.5 meters northwest of track, 1 meter below base of rail; bottom of hole in top of stone or cement post (U. S. C. & G. S. b. m. D_5) ---------- 1,532.927

Arimo, about 2.3 miles northeast of, 5 meters east of milepole 628 of railroad, 15 meters southeast of track, 0.25 meter below base of rail; red metal cap on iron post (U. S. C. & G. S. b. m. E_5) ---------- 1,634.734

Essex, 40 meters north of ninth pole west of milepole 625½, 10 meters northwest of signboard on railroad, 15 meters northwest of track, 0.25 meter below base of rail; bottom of hole in top of stone or cement post (U. S. C. & G. S. b. m. F_5) ---------- 1,729.321

Fenner, about 3.4 miles southwest of, 29 meters west of sixth pole southwest of milepole 622 of railroad, 16 meters northwest of track, 0.5 meter below base of rail; red metal cap on iron post (U. S. C. & G. S. b. m. G_5) ---------- 1,911.256

Fenner, 41 meters east of southwest corner of station building of railroad, 21 meters southeast of track, on level with base of rail; bottom of hole in top of cement or stone post (U. S. C. & G. S. b. m. H_5) ---------- 2,096.446

Piute, about 2.2 miles southwest of, 30 meters north of seventh pole northeast of milepole 616½ of railroad, 14.5 meters northeast of track, 0.25 meter below base of rail; red metal cap on iron post (U. S. C. & G. S. b. m. I_5) ---------- 2,219.267

Piute, 42 meters west of seventh pole southwest of milepole 614, 12 meters northwest of signboard on railroad, 17.5 meters northwest of track, 0.25 meter below base of rail; bottom of hole in top of cement or stone post (U. S. C. & G. S. b. m. J_5) ---------- 2,328.847

Goffs, about 2.3 miles southwest of, 27 meters west of first pole southwest of milepole 611½ of railroad, 11 meters northwest of track, 0.25 meter below base of rail; red metal cap on iron post (U. S. C. & G. S. b. m. K_5) ---------- 2,472.331

Goffs, 19 meters northwest of track of Barnwell branch of Atchison, Topeka & Santa Fe Ry., 41 meters northwest of northwest corner of station building, in front of store of H. P. Ware, postmaster; bottom of hole in top of cement or stone post (U. S. C. & G. S. b. m. L_5) ---------- 2,581.360

	Feet
Goffs, about one-third of a mile west of, opposite fourth pole east of milepole 902½, near the Y of Barnwell branch of Atchison, Topeka & Santa Fe Ry., about 225 meters northwest of main track, 200 meters southwest of branch track; red metal cap on iron post (U. S. C. & G. S. b. m. M_5)	2,572.371
Vontrigger, about 3.8 miles southeast of, 13⅔ poles southwest of milepole 6 of railroad, 18 meters northeast of track, level with base of rail, a piece of 50-pound railroad rail about 5½ feet long, set on end on a large boulder, top end bearing a chiseled "U.+S." to which the elevation refers (U. S. C. & G. S. b. m. N_5)	2,972.081

DEGREE QUADRANGLE 34°–35°, 116°–117°

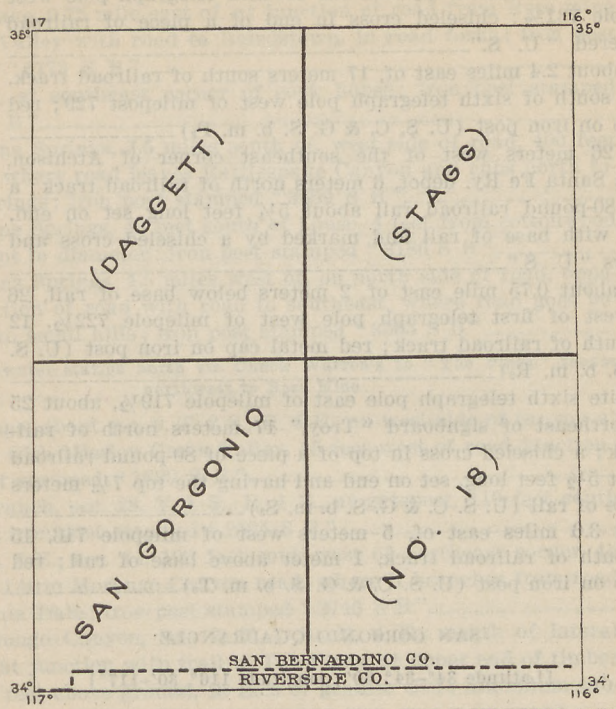


FIGURE 12.—Diagram of degree quadrangle 34°–35°, 116°–117°

DAGGETT QUADRANGLE

[Latitude 34° 30′–35°; longitude 116° 30′–117°]

SAN BERNARDINO COUNTY

Precise leveling by U. S. Coast and Geodetic Survey

From Barstow east along Atchison, Topeka & Santa Fe Ry. to Troy

	Feet
Nebo, about 2 miles northwest of, 9 telegraph poles southeast of milepost 744, 20 meters southwest of railroad track, about 1 meter southwest of right of way, not lettered; bottom of hole in top of stone or cement post (U. S. C. & G. S. b. m. K_3)	2,064.858
Nebo, about 1.25 miles southeast of, 2.5 meters northwest of milepost 740½, 16 meters south of railroad track, set in sandy soil; red metal disk on iron post	2,023.398
Daggett, outside southeast corner of depot gardens, 17 meters south of railroad track, 35 meters east of southeast corner of depot, 0.5 meter outside fence corner, three rail connections bolted together, set in sandy soil, on top of middle piece; chiseled cross (U. S. C. & G. S. b. m. M_3)	2,005.865

	Feet
Daggett, about 3.25 miles east of, 6 meters southwest of second telegraph pole east of milepole 734½, 14 meters south of railroad track; red metal disk on iron post (U. S. C. & G. S. b. m. N_3)	1,977.293
Minneola, 45 meters southwest of signboard "Minneola," 32 meters north of railroad track, opposite the seventh telegraph pole west of milepole 731½; chiseled cross in end of a piece of railroad rail, lettered "U. S."	1,915.019
Minneola, about 2.4 miles east of, 17 meters south of railroad track, 2 meters south of sixth telegraph pole west of milepost 729; red metal cap on iron post (U. S. C. & G. S. b. m. P_3)	1,883.418
Newberry, 26 meters west of the southeast corner of Atchison, Topeka & Santa Fe Ry. depot, 6 meters north of railroad track; a piece of 80-pound railroad rail about 5¼ feet long set on end, top level with base of rail and marked by a chiseled cross and the letters "U. S."	1,829.921
Newberry, about 0.75 mile east of, 2 meters below base of rail, 26 meters west of first telegraph pole west of milepole 722½, 12 meters south of railroad track; red metal cap on iron post (U. S. C. & G. S. b. m. R_3)	1,803.218
Troy, opposite sixth telegraph pole east of milepole 719½, about 25 meters northeast of signboard "Troy," 17 meters north of railroad track; a chiseled cross in top of a piece of 80-pound railroad rail, about 5½ feet long, set on end and having the top 7⅓ meters below base of rail (U. S. C. & G. S. b. m. S_3)	1,776.293
Troy, about 3.6 miles east of, 5 meters west of milepole 716, 15 meters south of railroad track, 1 meter above base of rail; red metal cap on iron post (U. S. C. & G. S. b. m. T_3)	1,793.153

SAN GORGONIO QUADRANGLE

[Latitude 34°–34° 30′; longitude 116° 30′–117°]

RIVERSIDE AND SAN BERNARDINO COUNTIES

Primary leveling by C. R. Smith, R. A. Hamilton, and C. C. Ward in 1899

From fifteenmile point east to Box S ranch (1 mile southeast of Rabbit Springs), thence southeast to point near Cactus Springs, thence west via Holcomb Valley to point 4.3 miles east of Coxey's ranch

	Feet
Box S ranch, sec. 11, T. 4 N., R. 1 W., south side of section, in front of dwelling house; iron post stamped "2935 S B"	2,936.496
Box S Springs, sec. 4, T. 3 N., R. 1 E., northeast corner of section, 6.25 miles southeast of Box S ranch, at east end of watering trough; iron post stamped "3550 S B"	3,550.449
Cactus Flat, at northeast corner of picket fence in front of James Johnson's residence; + on embedded square stone monument	5,879.21
Cactus Flat, 1 mile southeast of, sec. 30, T. 3 N., R. 2 E., where road branches off to the south from road to Rose Mine; iron post stamped "6031 S B"	6,032.096
Holcomb Valley, sec. 31, T. 3 N., R. 1 E., in front of offices of Holcomb Valley Mining Co.; iron post stamped "7239 SB"	7,240.328

From Holcomb Valley south 3 miles to Bear Lake; thence west to Fawnskin Valley, thence northeast to Holcomb Valley

Holcomb Valley, 3.5 miles southeast of, where west branch of Poligue Canyon road joins Bear Valley road to San Bernardino; iron post stamped "6761 S B"	6,762.179

Fawnskin Valley, upper end of, where Holcomb Valley road forks to the northeast; iron post stamped "7211 S B" ..... Feet 7,212.264

From Bairdstown (south of Cactus Flat) southeast via Rose Mine to Mound Springs, thence north to Old Womans Springs, thence southwest to Cushenberry

Baldwin Lake, 0.75 mile east of, at junction of road from Rose mine to Bear Valley with road to Bairdstown, in road forks; iron post stamped "6773 S B" 6,773.715

Rose mine, at southeast corner of cook house; iron post stamped "6867 S B" 6,867.897

Old Womans Springs, 3.5 miles south of, west side of road, 400 feet north of where road leaves Rattlesnake Canyon and runs north toward springs; iron post stamped "3659 S B" 3,660.045

Old Womans Springs, 40 feet south of house, 4 feet from cottonwood tree 1 foot in diameter; iron post stamped "3186 S B" 3,186.844

Old Womans Springs, 4.5 miles west of, on north side of road, opposite junction of road with road to southeast, where road goes between two small hills; iron post stamped "3565 S B" 3,565.812

From Whitewater station north via Chuck Warren's to "The Pipes," thence northwest to Rose Mine

Dry Morongo, about sec. 9, T. 2 S., R. 4 E., on west side of canyon at junction with Mission Creek Valley, 15 feet west of road junction; iron post stamped "1800 S B" 1,800.775

Warren's ranch, sec. 28, T. 1 S., R. 4 E., at gatepost, 110 feet south of barn; iron post stamped "2504 S B" 2,504.799

T. 1 S., R. 4 E., sec. 14, 100 feet southwest of northeast corner, in forks of Little Morongo Canyon road, where it branches from road to Virginia Dale; iron post stamped "2745 S B" 2,745.974

Little Morongo Canyon, sec. 2, T. 1 S., R. 4 E., mouth of lateral canyon, at junction with trail to The Pipes, at upper end of timber patch, 3 feet above ground, in face of granite cliff; aluminum tablet stamped "3380 S B" 3,380.836

The Pipes, 20 feet northeast of house, 45 feet southwest of barn, 2 feet east of yucca tree; iron post stamped "4459 S B" 4,459.730

Burns Spring, 1.75 miles northwest of, in saddle of small spur ridge, at top of first steep hill out of canyon; iron post stamped "5438 S B" 5,438.570

Rattlesnake Canyon, 1.1 miles southeast of, at junction of road from The Pipes to Rose Mine with road to Old Womans Springs, 23 feet west of piñon tree; iron post stamped "5736 S B" 5,736.744

From Whitewater siding northwest along Whitewater Canyon to sec. 36, T. 1 S., R. 4 E.

Whitewater Creek, sec. 36, T. 1 S., R. 2 E., 475 feet southwest of junction with creek from the south, southwest side of Whitewater Canyon, 500 feet south of cluster of pine trees, in vertical face of granite ledge, 1.5 feet above ground; aluminum tablet stamped "3438 S B" 3,438.908

From Dry Morongo west to corner of Tps. 1 and 2 S., Rs. 3 and 4 E.

Tps. 1 and 2 S., Rs. 3 and 4 E., common corner, which is also corner of the San Bernardino Forest Reserve and is marked "No. 99," in top of cement-filled iron post 4 inches square; aluminum tablet stamped "3075 S B" 3,075.819

From sec. 14, T. 1 S., R. 4 E., northwest up Little Morongo Canyon to T. 1 N., R. 4 E. (about sec. 30, unsurveyed)

	Feet
Little Morongo, on south side of canyon, at second water camping place, in red-granite ledge, 10 feet above creek bed; aluminum tablet stamped "4831 S B"	4,831.826

STAGG QUADRANGLE

[Latitude 34° 30′–35°; longitude 116°–116° 30′]

SAN BERNARDINO COUNTY

Precise leveling by U. S. Coast and Geodetic Survey

From Hector east along Atchison, Topeka & Santa Fe Ry. to Siberia

	Feet
Hector, 23 meters east of signboard "Hector," outside southeast corner of station-park fence, 7 meters north of railroad track, set level with the base of rail; bottom of hole in cement or stone post (U. S. C. & G. S. b. m. U_3)	1,862.578
Pisgah, about 2.6 miles northwest of, 4 meters southeast of eighth telegraph pole east of milepole 710, 18 meters south of railroad track, 3 meters south of right of way, set 2.3 meters above base of rail; red metal cap on iron post (U. S. C. & G. S. b. m. V_3)	2,016.397
Pisgah, 5 meters southeast of signboard "Pisgah," 11 meters northeast of railroad track, 31 meters north of sixth telegraph pole northeast of milepole 707, set in sand and gravel, 0.5 meter above base of rail; bottom of hole in stone or cement post (U. S. C. & G. S. b. m. W_3)	2,149.182
Pisgah, about 2.25 miles east of, 2 meters south of second telegraph pole southeast of milepole 705, 14 meters south of railroad track, set in sandy soil, 1 meter above base of rail; red metal cap on iron post (U. S. C. & G. S. b. m. X_3)	2,168.497
Lavic, at northwest corner of station platform, 38 meters west of southeast corner of Atchison, Topeka & Santa Fe Ry. depot, 5 meters northeast of railroad track, 0.25 meter above base of rail; bottom of hole in stone or cement post (U. S. C. & G. S. b. m. Y_3)	2,171.735
Lavic, about 1.8 miles southeast of, 3 meters southeast of fifth telegraph pole southwest of milepole 700½, 13 meters south of railroad track, set in gravel, 0.5 meter above base of rail; red metal cap on iron post (U. S. C. & G. S. b. m. Z_3)	2,129.621
Arctic, 20 meters south of signboard "Arctic," 8 meters west of first telegraph pole east of milepole 698½, 14 meters south of railroad track, 0.5 meter above base of rail; bottom of hole in top of stone or cement post (U. S. C. & G. S. b. m. A_4)	2,024.536
Arctic, about 1.75 miles east of, 5 meters southwest of sixth telegraph pole east of milepole 696½, 16 meters south of railroad track; red metal disk on iron post (U. S. C. & G. S. b. m. B_4)	1,962.318
Ludlow, about 1⅛ miles west of, 18 meters northwest of sixth telegraph pole southwest of milepole 694½, on north wing of northeast red sandstone abutment of bridge 695B, on horizontal surface of second step, 3.5 meters north of railroad track, 0.66 meter below base of rail; bottom of hole (U. S. C. & G. S. b. m. C_4)	1,822.523
Ludlow, outside northwest corner of lot inclosing section foreman's house, 49 meters north of railroad track, 37 meters northeast of northeast corner of depot; bottom of hole in stone or cement post (U. S. C. & G. S. b. m. D_4)	1,773.074

Feet

Ludlow, about 1.75 miles northeast of, 3½ telegraph poles east of milepole 692, on north red-sandstone coping of culvert 692D, in horizontal surface of northeast corner, 4 meters north of railroad track, 0.5 meter below base of rail; copper bolt set in lead or cement flush with surface, lettered "U. S. B. M." ---------- 1,753.123

Ash Hill, about 2.8 miles west of, 7 meters south of milepole 689½, 17 meters south of railroad track; red metal cap on iron post (U. S. C. & G. S. b. m. F_4) ---------- 1,819.766

Ash Hill, 6½ telegraph poles northwest of milepole 656½, 31 meters east of signboard "Ash Hill," 16 meters northeast of railroad track; bottom of hole in stone or cement post (U. S. C. & G. S. b. m. G_4) ---------- 1,943.585

Ash Hill, about 1.9 miles east of, 6½ telegraph poles east of milepole 695, on south wing of southeast red sandstone abutment of bridge 695D, in horizontal surface of top step, 3 meters south of railroad track, 0.2 meter below base of rail; bottom of hole (U. S. C. & G. S. b. m. H_4) ---------- 1,842.384

Klondike, about 2.1 meters northwest of, 4 telegraph poles northwest of milepole 654, on north wing of northeast red sandstone abutment of bridge 655A, in horizontal surface, 3 meters northeast of railroad track, 0.25 meter below base of rail; bottom of hole (U. S. C. & G. S. b. m. I_4) ---------- 1,796.161

Klondike, about 1.1 miles northwest of, 4 telegraph poles northeast of milepole 683, 3 meters east of railroad track, in top horizontal surface of east wing of southeast (red sandstone) abutment of bridge 684A; surface within an outlined square (U. S. C. & G. S. b. m. J_4) ---------- 1,727.913

Klondike, 23 meters northwest of milepole 682, 7 meters south of signboard "Klondike," 13 meters southwest of railroad track, 2 meters below base of rail, set in sand and gravel; bottom of hole cut in stone or cement post (U. S. C. & G. S. b. m. K_4) ---------- 1,646.696

Siberia, about 3 miles northwest of, 45 meters east of fifth telegraph pole northeast of milepole 679, 26 meters northwest of railroad track, 1.25 meters below base of rail; red metal cap on iron post (U. S. C. & G. S. b. m. L_4) ---------- 1,444.905

DEGREE QUADRANGLE 34°–35°, 117°–118°

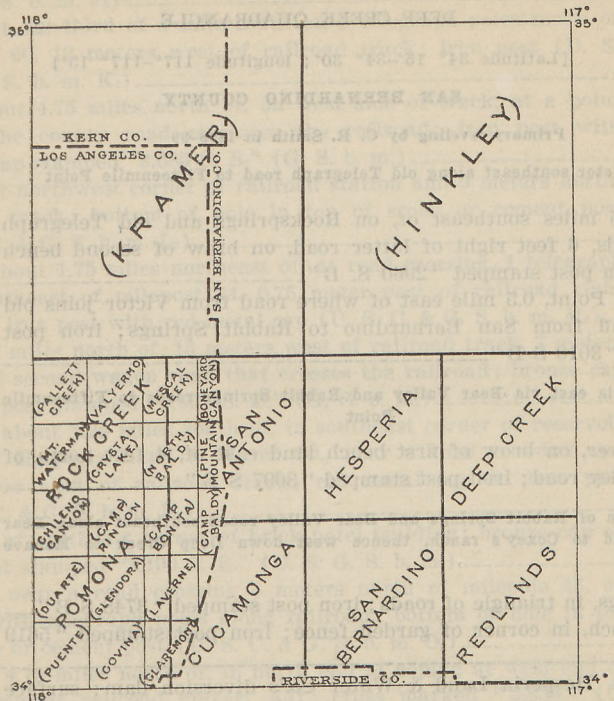


FIGURE 13.—Diagram of degree quadrangle 34°–35°, 117°–118°

CUCAMONGA QUADRANGLE

[Latitude 34°–34° 15′; longitude 117° 30′–117° 45′]

LOS ANGELES AND SAN BERNARDINO COUNTIES

Primary leveling by H. S. Crowe in 1897

From Pomona east along Southern Pacific R. R. to South Etiwanda (double-rodded line)

	Feet
Pomona, J. H. Graber building, northwest corner of railroad reservation and Gordon St., four rows of brick from corner, 7 courses from sidewalk; bronze tablet stamped "861"	862.646
Ontario, in grass plot in front of station, 79.2 feet south of southwest corner of station; iron post stamped "986"	987.011
Ontario, in southwest corner of Southern Pacific Hotel, seventh course from sidewalk and two courses from doorway on west side of building; bronze tablet stamped "992"	992.951
Ontario, in northwest corner of bank building, on Main Ave., second course from steps, eighth course above sidewalk; bronze tablet stamped "987"	988.466

	Feet
South Cucamonga (Zucker), in station park, 45.1 feet from southeast corner of station and 2.6 feet from telegraph pole; iron post stamped "958"	958.133
South Etiwanda, 58.6 feet south of center of wagon road and 2.6 feet west of telegraph pole; iron post stamped "981"	982.652

DEEP CREEK QUADRANGLE

[Latitude 34° 15′–34° 30′; longitude 117°–117° 15′]

SAN BERNARDINO COUNTY

Primary leveling by C. R. Smith in 1898–99

From Victor southeast along old Telegraph road to Fifteenmile Point

	Feet
Victor, 5.75 miles southeast of, on Rocksprings and old Telegraph Line roads, 6 feet right of latter road, on brow of second bench land; iron post stamped "2960 S. B"	2,960.360
Fifteenmile Point, 0.5 mile east of where road from Victor joins old stage road from San Bernardino to Rabbit Springs; iron post stamped "3010 S B"	3,011,180

From Hesperia east via Bear Valley and Rabbit Springs roads to Fifteenmile Point

Mohave River, on brow of first bench land east of, 4 feet north of Bear Valley road; iron post stamped "3097 S B"	3,097.441

From junction of Rabbit Springs and Bear Valley roads southeast along Bear Valley road to Coxey's ranch, thence west down Deep Creek to Mohave River

Rock Springs, in triangle of roads; iron post stamped "3748 S B"	3,748.581
Coxey's ranch, in corner of garden fence; iron post stamped "5619 S B"	5,620.053
Deep Creek, Hesperia Land & Water Co.'s diversion dam; surface of top of cement work	3,366.94

From Hesperia southeast along pipe line to Mohave River (southwest corner sec. 7, T. 3 N., R. 3 W.), thence southwest to Burcham's ranch

T. 3 N., R. 3 W., southwest corner sec. 7, 7 miles southeast of Hesperia; iron post stamped "2960 S B" (unstable)	2,960.531

From Coxey's ranch southeast 4.3 miles to junction of road to Pine Flats

Coxey's ranch, 4.3 miles southeast of, at point where road to Pine Flat branches off, in forks of road; iron post stamped "6823 S B"	6,823.943

HESPERIA QUADRANGLE

[Latitude 34° 15′–34° 30′; longitude 117° 15′–117° 30′]

SAN BERNARDINO COUNTY

Precise leveling by U. S. Coast and Geodetic Survey

From Keenbrook north along Atchison, Topeka & Santa Fe Ry. to Hesperia

	Feet
Keenbrook, 1 telegraph pole west of signboard at, 25 meters southeast of road crossing; iron post (U. S. C. & G. S. b. m. H_2)	2,480.353
Cajon, about 2.5 miles south of, on west side of track, in center of coping of large concrete arch bridge A66 of the Atchison, Topeka and Santa Fe Ry.; red metal disk (U. S. C. & G. S. b. m. I_2)	2,631.255

	Feet
Dell, at railroad station, inside of garden fence east of the county road; iron post with bronze cap stamped "2.768 S. B." (G. S. b. m)	2,768.584
Cajon, 18 meters northwest of railroad station, in northwest end of flower plat; bottom of hole in top of stone or cement post (U. S. C. & G. S. b. m. J_2)	2,927.803
Gish, about one-third of a mile south of, 2 telegraph poles north of milepole 60, 12 meters west of railroad track; iron post (U. S. C. & G. S. b. m. K_2)	3,263.268
Cajon, about 4.75 miles north of, on west side of track, at a point where the county road recrosses the railroad; iron post with bronze cap stamped "3,685 S. B." (G. S. b. m.)	3,685.511
Summit, at northwest corner of railroad station and 9 meters northwest of track; bottom of hole in top of stone or cement post (U. S. C. & G. S. b. m. L_2)	3,823.621
Summit, about 1.75 miles northeast of, at road crossing, 1 telegraph pole southeast of milepost 54, 0.75 meter east of railroad right of way; iron post with red metal cap (U. S. C. & G. S. b. m. M_2)	3,730.376
Summit, 2 miles north of, 13 meters west of railroad track, 7 meters north of second wagon road that crosses the railroad; bronze cap on iron post stamped "3,462 S. B." (G. S. b. m.)	3,463.169
Hesperia, about 1.25 miles south of, in southeast corner of reservoir tract of Hesperia Land & Water Co., near a road crossing and 45 meters west of railroad track; red metal cap on iron post (U. S. C. & G. S. b. m. N_2)	3,265.866
Hesperia, at northeast corner of brick hotel building; bronze cap on iron post stamped "3,190 S. B." (U. S. G. S. b. m.)	3,190.938
Hesperia, near a road crossing 5 meters north of milepole 45, on range with telegraph poles along railroad; bottom of hole in top of stone or cement post (U. S. C. & G. S. b. m. O_2)	3,180.223
Hesperia, 4.75 miles north of, in north end of coping at west end of small cement railroad culvert A41; cross marked "2,856" (G. S. b. m.)	2,857.264
Primary leveling by C. R. Smith in 1898–99	
From Hesperia west along road to Tamborino ranch, thence northeast along north branch of Sheep Creek to point 5 miles west of Victor	
Hesperia, 5 miles west of, at junction of road to Tamborino ranch with road from Oro Grande to San Bernardino, via Cajon Pass; iron post stamped "3522 S B"	3,522.520
Hesperia, 10 miles west of, at southeast corner of Tamborino ranch, on south side of Sheep Creek road, 30 feet southeast of corner common to secs. 13, 14, 23, and 24, T. 4 N., R. 6 W.; iron post stamped "3740 S B"	3,740.527
From Keenbrook northwest to Applewhite (Glen) ranch	
Applewhite (Glen) ranch, 40 feet west of westernmost building; iron post stamped "3256 S B"	3,257.340
From Summit east to Burcham's ranch, thence southwest along Cleghorn Canyon to Cosy Dell	
Burcham's ranch, on east end of south side rail of large cattle scales; cross cut on iron plate	3,181.94
Tps. 2 and 3 N., Rs. 4 and 5 W., 400 feet south of common corner, on left side of road by gate in west fence of Wixum's ranch on West Fork of Mohave River; iron post stamped "3355 S B"	3,355.366

HINKLEY QUADRANGLE

[Latitude 34° 30′–35°; longitude 117°–117° 30′]

SAN BERNARDINO COUNTY

Precise leveling by U. S. Coast and Geodetic Survey

From Victorville north and northeast along Atchison, Topeka & Santa Fe Ry. to Barstow

	Feet
Victorville, about 1.5 miles south of, 7½ telegraph poles southeast of milepost 38, at an offset in the Atchison, Topeka & Santa Fe Ry. right of way fence; red metal cap on iron post (U. S. C. & G. S. b. m. P_2)	2,746.963
Victorville, at south corner of road crossing near first telegraph pole east of milepost 37, 100 meters north of wagon bridge over Mohave River, 20 meters west of railroad track; bronze cap on iron post stamped "2,723 S. B." (U. S. G. S. b. m.)	2,723.699
Victorville, about 90 meters south of railroad station, in front face of northerly corner of cement stone building owned by J. C. Turner, 1.3 meters above walk; red metal disk (U. S. C. & G. S. b. m. Q_2)	2,720.870
Victorville, about 150 meters south of railroad station, in northeast corner of public-school grounds; bottom of hole in top of stone or cement post (U. S. C. & G. S. b. m. R_2)	2,730.867
Victorville, about 0.5 mile northwest of, on red sandstone base at east side of north end of steel railroad trestle A37; bottom of hole in horizontal surface (U. S. C. & G. S. b. m. S_2)	2,704.496
Oro Grande, 0.3 mile southeast of the Atchison, Topeka & Santa Fe Ry. station, 7 telegraph poles northwest of milepost 32, in range with poles; red metal cap on iron post (U. S. C. & G. S. b. m. T_2)	2,647.915
Oro Grande, east of railroad station, in public-school grounds, 0.3 meter southwest of south porch of schoolhouse; bottom of hole cut in top of stone or cement post (U. S. C. & G. S. b. m. U_2)	2,652.901
Oro Grande, about 2.5 miles northwest of, on westerly corner of concrete abutment to trestle A30 of the railroad, 3⅔ telegraph poles southeast of milepost 29; surface within an outlined square (U. S. C. & G. S. b. m. V_2)	2,575.891
Helen, about 5 miles south of, midway between railroad track and public road, opposite milepole 26; red metal disk on iron post (U. S. C. & G. S. b. m. W_2)	2,522.823
Helen, about 3 miles south of, about 80 meters west of milepole 24, in corner of fence; red metal disk (U. S. C. & G. S. b. m. X_2)	2,484.749
Helen, about 20 meters northeast of water tank, on railroad right of way, in range with telegraph poles; bottom of hole in top of stone or cement post (U. S. C. & G. S. b. m. Y_2)	2,429.970
Helen, about 1.5 miles north of, on railroad right of way, at milepole 19½, in range with telegraph poles, and 1.5 meters above rail; red metal disk on iron post (U. S. C. & G. S. b. m. Z_2)	2,428.601
Helen, about 4.5 miles north of, concrete railroad culvert A17, in center of horizontal surface of south coping; surface within an outlined square (U. S. C. & G. S. b. m. A_3)	2,376.127
Cottonwood, about 2 miles southwest of, 1 telegraph pole northeast of railroad milepole 14, in range with poles; red metal disk on iron post (U. S. C. & G. S. b. m. B_3)	2,330.622

	Feet
Cottonwood, on railroad right of way, 2½ telegraph poles north of milepole 12, at northwest corner of section house, 1.5 meters below rail; bottom of hole in top of stone or cement post (U. S. C. & G. S. b. m. C_3)	2,272.171
Cottonwood, about 2 miles north of, on railroad right of way, 2 telegraph poles southwest of milepole 10, on concrete culvert A11, in center of horizontal surface of northwest coping; surface within an outlined square (U. S. C. & G. S. b. m. D_3)	2,258.824
Cottonwood, about 3.5 miles north of, in range with telegraph poles on railroad right of way, at milepole 8½; red metal disk on iron post (U. S. C. & G. S. b. m. E_3)	2,246.675
Todd, about 1.25 miles northeast of, at road crossing, 11 meters southeast of ninth telegraph pole northeast of milepole 5; red metal disk on iron post (U. S. C. & G. S. b. m. F_3)	2,231.436
Barstow, about 1 mile south of, on railroad right of way, 1½ telegraph poles south of milepole 1, on concrete culvert A2, 0.25 meter from north end of horizontal surface of east coping; copper bolt, lettered "U. S." (U. S. C. & G. S. b. m. G_3)	2,138.769
Barstow, about 215 meters west of railroad station, 2½ telegraph poles east of milepole 747, 35 meters north of railroad track, on land owned by Charles O'Donnell, in a fence corner; bottom of hole in stone or cement post (U. S. C. & G. S. b. m. H_3)	2,102.033
Barstow, on railroad right of way, at south end of viaduct over railroad tracks, on northwest corner of west concrete foundation; red metal disk (U. S. C. & G. S. b. m. I_3)	2,111.443
Barstow, about 100 meters south of railroad station, in public-school grounds, at southwest corner of school building, set in cement; red metal disk (U. S. C. & G. S. b. m. J_3)	2,129.163

Precise leveling by L. F. Biggs in 1906

From Barstow along Atchison, Topeka & Santa Fe Ry. to Kramer

Barstow, 705 feet west of station, 2½ telegraph poles east of milepost 747, 115 feet north of track, on land of Charles O'Donnell, in fence corner; bottom of a square hole in top of cement post projecting 6 inches above ground (established by U. S. Coast and Geodetic Survey)	2,102.033
Barstow, on railroad right of way, at south end of viaduct over track, northwest corner of west concrete foundation; red metal U. S. C. & G. S. tablet	2,111.443
Barstow, 2 miles west of, 16 feet north of milepost 749; iron post stamped "2139"	2,139.700
Barstow, 5 miles west of, 6 feet north of first pole west of milepost 752; iron post stamped "2174"	2,173.846
Barstow, 8 miles west of, 6 feet north of milepost 755; iron post stamped "2175"	2,175.164
Barstow, 11 miles west of, 6 feet north of first pole west of milepost 758; iron post stamped "2179"	2,179.026
Barstow, 14 miles west of, 6 feet north of milepost 761; iron post stamped "2185"	2,185.811
Kramer, 16 miles east of, 6 feet north of milepost 764; iron post stamped "2247"	2,247.248
Hawes, in front of station; top of rail	2,281.5

	Feet
Kramer, 13 miles east of, 6 feet north of milepost 767; iron post stamped "2281"	2,281.056
Kramer, 10 miles east of, 6 feet north of milepost 770; iron post stamped "2368"	2,368.251
Kramer, 7 miles east of, 6 feet north of first pole west of milepost 773; iron post stamped "2423"	2,422.832
Kramer, 4 miles east of, 6 feet north of milepost 776; iron post stamped "2456"	2,456.080

Primary leveling by L. F. Biggs in 1907

From Barstow north 6 miles along road toward Ballarat

Barstow, 215 meters west of railroad station, on land of Charles O'Donnell, in fence corner; top of stone post (U. S. Coast and Geodetic Survey b. m. H_3 1906)	2,102.033
Barstow, 2.6 miles north of, 20 feet west of road; iron post stamped "B 2386 1906"	2,386.788
Barstow, 6 miles north of, at forks of roads; iron post stamped "B 2695 1906"	2,691.352

Primary leveling by C. R. Smith in 1898

From Victor west along road 5.2 miles

Victor, 60 feet north of wagon bridge over Mohave River and 60 feet west of track; iron post stamped "2723 S B" (recovered by U. S. Coast and Geodetic Survey)	2,723.699
Victor, south end of veranda of Turner Hotel; cross chiseled on west end of top stone step	2,717.17
Victor, 5.25 miles west of, where Oro Grande and San Bernardino road crosses road from Victor to Sheep Creek; iron post stamped "3063 S B"	3,063.994

KRAMER QUADRANGLE

[Latitude 34° 30′–35°; longitude 117° 30′–118°]

KERN, LOS ANGELES, AND SAN BERNARDINO COUNTIES

Precise leveling by L. F. Biggs in 1906

Along Atchison, Topeka & Santa Fe Ry.

	Feet
Kramer, 1 mile east of, 6 feet north of second pole west of milepost 779; iron post stamped "2483"	2,483.197
Kramer, 2 miles west of, 6 feet north of first pole west of milepost 782; iron post stamped "2508"	2,509.753
Kramer, 5 miles west of, 6 feet north of milepost 785; iron post stamped "2436"	2,436.261
Kramer, 8 miles west of, 6 feet north of milepost 788; iron post stamped "2374"	2,374.712
Rich, in front of station; top of rail	2,347.3
Muroc, 7 miles east of, 6 feet north of second pole west of milepost 791; iron post stamped "2281"	2,281.088
Muroc, 4 miles east of, 6 feet north of milepost 794; iron post stamped "2275"	2,275.563

	Feet
Muroc, 1 mile east of, 6 feet north of milepost 797; iron post stamped "2272"	2,272.655
Muroc, in front of station; top of rail	2,286.7
Muroc, 2 miles northwest of, 6 feet north of milepost 800; iron post stamped "2322"	2,321.893
Muroc, 5 miles northwest of, 6 feet north of milepost 803; iron post stamped "2370"	2,370.625

POMONA QUADRANGLE

[Latitude 34°–34° 15′; longitude 117° 45′–118°]

LOS ANGELES COUNTY

Primary leveling by H. S. Crowe in 1897

From Bassett east along Southern Pacific R. R. to Pomona (double-rodded line)

	Feet
Bassett, 86.7 feet from west end of platform and 107.7 feet south of southwest corner of station; iron post stamped "295"	295.740
Puente, 18 feet west of turnstile in fence north of station, 125 feet north of east end of platform; iron post stamped "328"	328.859
Puente warehouse, 1.4 feet from northwest corner and 1.2 feet below brick foundation; bronze tablet stamped "331"	331.996
Lemon, in southeast corner of fence of railroad reservation, 113.2 feet from southwest corner of station; iron post stamped "519"	520.315
Spadra, 122.4 feet from northwest corner of station; iron post stamped "710"	711.094
Pomona, 55 feet from station, near telegraph pole near park hedge; iron post stamped "861" (C. & G. S. b. m. P 36)	862.364
Pomona, in Odd Fellows Building, corner Second and Ellen streets, on Ellen St. side, 11.6 feet from Second St. corner, in third course from window and 8.5 courses from sidewalk; bronze tablet stamped "854" (C. & G. S. b. m. R 36)	855.746

REDLANDS QUADRANGLE

[Latitude 34°–34° 15′; longitude 117°–117° 15′]

SAN BERNARDINO COUNTY

Checked primary leveling by R. A. Farmer in 1902

Near Redlands

	Feet
Redlands Junction, east of station, west side of county road, south line of Southern Pacific Co.'s right of way; iron post stamped "1201 S B"	1,201.973
Brookside, west of siding, west side of county road, at southeast corner of Brookside vineyard; iron post stamped "1301 S B"	1,302.186

ROCK CREEK QUADRANGLE

[Latitude 34° 15′–34° 30′; longitude 117° 45′–118°]

LOS ANGELES COUNTY

Primary leveling by C. R. Smith in 1899

From north side of sec. 4, T. 4 N., R. 8 W., west to Rock Creek, thence southeast to Shoemaker (Big Rock villa)[1]

	Feet
Sheep Creek, 14.5 miles west of, at forks where second road to Palmdale branches to northwest; iron post stamped "3497 S B"	3,497.987
Shoemaker's ranch, on Rock Creek, 50 feet west of hotel; iron post stamped "3927 S B"	3,927.655

SAN ANTONIO QUADRANGLE

[Latitude 34° 15′–34° 30′; longitude 117° 30′–117° 45′]

LOS ANGELES AND SAN BERNARDINO COUNTIES

Primary leveling by C. R. Smith in 1899

From Applewhite northwest via North Fork of Lytle Creek and Lone Pine Canyon roads to center of T. 3 N., R. 7 W., thence north and east along Sheep Creek road to Tamborino (10 miles west of Hesperia)

	Feet
Glen (Applewhite) ranch, 5.45 miles northwest of, at mouth of Coldwater Canyon, near first pine tree above forks of road; iron post stamped "5017 S B"	5,018.166
Hesperia, 24.65 miles southwest of, at forks where Swartout road branches off to the west, north side of road; iron post stamped "6006 S B"	6,006.828
Hesperia, 19.35 miles southwest of, at forks where main traveled road branches off to northwest to Palmdale and Lancaster, west side of road; iron post stamped "4429 S B"	4,429.722
Hesperia, 10 miles west of, at the Tamborino ranch, south side of road; iron post stamped "3740 S B"	3,740.527

From mouth of Sheep Creek northwest along Lancaster and Palmdale Road to sec. 4, T. 4 N., R. 8 W.

Sheep Creek, 8 miles west of, in front of deserted frame dwelling on south side of road; iron post stamped "3763 S B" (possibly 3 feet too high)	3,763.793

From Sheep Creek summit west up Swartout Valley to Shoemaker

Swartout road summit, on south side of road in gap; iron post stamped "6862 S B" (true elevation is possibly 3 feet higher)	6,862.711

[1] These elevations are possibly in error on account of closure on line from southeast about 3 feet high.

SAN BERNARDINO QUADRANGLE

[Latitude 34°–34° 15′; longitude 117° 15′–117° 30′]

RIVERSIDE AND SAN BERNARDINO COUNTIES

Precise leveling by the U. S. Coast and Geodetic Survey

From Highgrove north along Atchison, Topeka & Santa Fe Ry. to Devore

	Feet
Highgrove, at south end of depot park; bronze tablet stamped "945" (U. S. G. S. b. m. 945)	945.792
Colton, at main entrance to Colton Grain & Milling Co.'s building; on east end of lowest cement step; surface within an outlined square (C. & G. S. b. m. A_2)	978.177
San Bernardino, about 1 mile southwest of railroad station, at southwest corner of Walnut St. crossing, in corner of a fence, on land owned by the city of Colton; iron post (U. S. C. & G. S. b. m. B_2)	1,075.087
San Bernardino, in stone foundation at northwest corner of courthouse; U. S. G. S. bronze tablet stamped "1,048"	1,048.738
San Bernardino, at southeast side of main entrance to public library, on south corner of granite balustrade; surface within outlined square (U. S. C. & G. S. b. m. C_2)	1,051.097
San Bernardino, on north side of Third St. near E St., in west end of water table on Katz Building; surface within an outlined square (U. S. C. & G. S. b. m. City)	1,045.093
San Bernardino, 1 mile northeast of railroad station, at southeast corner of Ninth and I streets, on land owned by J. B. Schmitzen, in the corner of a fence; iron post (U. S. C. & G. S. b. m. D_2)	1,100.074
Verdemont, about 2.8 miles southward from, 50 feet east of railroad track at a point where three wagon roads pass over a common crossing; iron post stamped "1,420 S. B." (U. S. G. S. b. m.)	1,421.093
Verdemont, about 2 miles southeast of, railroad trestle B76, on sloping surface of southwest end of southeast concrete abutment; copper bolt (U. S. C. & G. S. b. m. E_2)	1,511.208
Verdemont, 1 telegraph pole southeast of signboard at, 15 meters southwest of railroad track; iron post (U. S. C. & G. S. b. m. F_2)	1,735.876
Devore, near county-road crossing, about 55 meters northwest of milepost 71, 13 meters east of road, on land owned by J. A. Devore, at inside corner of a stone wall; iron post (U. S. C. & G. S. b. m. G_2)	2,022.394
Devore, about 0.5 mile west of, at northeast corner of crossroads at Glen Helen ranch; iron post stamped "2,008 S. B." (U. S. G. S. b. m.)	2,009.639

Primary leveling by H. S. Crowe in 1897 and C. R. Smith in 1898

From Riverside northeast to High Grove

High Grove, station park, south end of diamond-shaped lawn; iron post stamped "945" (recovered by U. S. Coast and Geodetic Survey)	945.792

From Riverside northeast along motor railroad to San Bernardino, thence northwest along Atchison, Topeka & Santa Fe Ry. to Keenbrook

Colton, 1 mile northeast of, at Lytle Creek, in northeast cylinder on east side of wagon-road bridge; copper bolt stamped "1007"	1,007.766

Feet

San Bernardino, in stone on northeast corner of courthouse; bronze tablet stamped "1048" (recovered by U. S. Coast and Geodetic Survey)---------- 1,048.738

Verdemont, 2.8 miles southward from, 50 feet east of track at point where three wagon roads pass over a common crossing; iron post stamped "1420 S. B." (recovered by U. S. Coast and Geodetic Survey)---------- 1,421.093

Glen Helen ranch, on east side of county road; iron post stamped "2008 S. B." (recovered by U. S. Coast and Geodetic Survey)---- 2,009.639

From South Etiwanda east along Southern Pacific R. R. to Mound City (double-rodded line)

San Sevaine, on south side of track, 231 feet from southwest corner of station, near fence; iron post stamped "1063"---------- 1,063.438

Bloomington, south side of track, 87.9 feet from southeast corner of station, 2.2 feet from telegraph pole and 7 feet from center of wagon road; iron post stamped "1090"---------- 1,090.499

Bloomington, in brick building at post office owned and occupied by W. H. H. Easton, southwest corner of Orchard and Commercial streets; in sixth course of brick above foundation and second course from southeast corner of building; bronze tablet stamped "1098"---------- 1,099.381

Colton, 1.25 miles west of, at cement company's storehouse, in wall on north side, 3.4 feet from east corner, 0.7 foot from top of foundation, 35.8 feet from center of track; bronze tablet stamped "1006"---------- 1,006.925

Colton, in corner of brick building at Transcontinental Hotel, in third course above top of corner post and in center of brick laid horizontally; bronze tablet stamped "978"---------- 979.353

From Colton east along Southern Pacific R. R. to vicinity of Palm Springs

Mound City, east of station; northeast corner of reservoir wall; copper bolt stamped "1079"---------- 1,080.042

LOS ANGELES COUNTY SPECIAL SURVEY

CUCAMONGA AND POMONA 15′ QUADRANGLES AND THE 6′ QUADRANGLES SHOWN IN THE FIGURE

[Latitude 34°–34° 15′; longitude 117° 30′–118°]

Precise leveling by U. S. Coast and Geodetic Survey in 1923

From Gabriel triangulation station east along base line and south to Southern Pacific Ry. between Ontario and Pomona with spur lines to these points and to Monrovia, Azusa, Covina, and San Dimas

Feet

Triangulation station Gabriel, about 2.5 miles south of Monrovia, 1.3 miles south from intersection of Atchison, Topeka & Santa Fe Ry. with California Ave., on east edge of dump grounds, 220 feet east of a small stream, 30 feet east of center line of old asphalt pavement on Dalton County road, 0.2 mile north of house owned by J. W. Kelley; standard disk station mark set in concrete----- 366.315

	Feet
Monrovia, in wall at left side of main entrance to National Bank of Monrovia; brass disk (U. S. C. & G. S. b. m. M–35)	546.964
Monrovia, on corner of South Myrtle and East Lime streets, in west face of building of Renaker Co., funeral directors; brass disk (U. S. C. & G. S. b. m. N–35)	560.671
Monrovia, in east face of public library, 2 feet north of southeast corner and 3.5 feet above ground; brass disk (U. S. C. & G. S. b. m. O–35)	558.135
Monrovia, about 2.5 miles south of, 1.7 miles south of intersection of Mount Ave. and the Atchison, Topeka & Santa Fe Ry., 0.5 mile south of Monrovia dump at end of Mount Ave., on a high point of ground between the main beds of San Gabriel Wash; concrete post with disk in top (U. S. C. & G. S. b. m. J–35)	390.724
Monrovia, about 2.5 miles south and 1 mile east of, in San Gabriel Wash, on high point of ground; concrete post with disk in top (U. S. C. & G. S. b. m. K–35)	443.818
Triangulation station Edison, about 1.5 miles south and 2 miles west of Azusa, 1,600 feet west of Dalton substation of Southern California Edison Co., 20 feet north of center of highway; station and reference marks are standard disks set in concrete, reference mark is 58.8 feet S. 25° E. of station — Station mark =	492.866
— Reference mark =	493.044
Azusa, about 1.3 miles south and 0.6 mile west of, 10 feet south of center line of Gladstone Ave.; concrete post with disk in top (U. S. C. & G. S. b. m. L–35)	506.475
Azusa, in southwest corner of First National Bank Building; brass disk (U. S. C. & G. S. b. m. P–35)	611.049
Azusa, in east face of Public Library, 3.2 feet above ground; brass disk (U. S. C. & G. S. b. m. Q–35)	612.689
Triangulation station Citrus, about 1.5 miles north of Covina, 70 feet east of center line of Citrus Ave., 11 feet north of center line of Gladstone Ave.; standard disk station mark set in concrete (U. S. C. & G. S. b. m.)	589.044
Covina, in south face of Fire Department building on East College St. (U. S. C. & G. S. b. m. R–35)	553.601
Covina, in north face of telephone office on East College St.; brass disk (U. S. C. & G. S. b. m. S–35)	551.584
Covina, in east face of yellow-brick building on Citrus Ave. owned by Charles Osborn; brass disk (U. S. C. & G. S. b. m. T–35)	547.604
Covina, in north face of building on Badillo St. owned by Irvin G. Reynolds; brass disk (U. S. C. & G. S. b. m. U–35)	546.321
Triangulation station Dalton, about 1.5 miles north and 0.75 mile east of Grammar School at Covina, 8 feet north of center line of Gladstone Ave.; standard disk station mark set in concrete (U. S. C. & G. S. b. m.)	642.509
Triangulation station Gladstone, about 2.5 miles west and 0.5 mile north of San Dimas, about 700 feet east of a north and south road, 11 feet north of center line of Gladstone Ave., reference mark is 106 feet north of station; station and reference marks are standard disks set in concrete — Station mark =	761.189
— Reference mark =	761.901

	Feet
Triangulation station Dimas, about 0.5 mile north and 0.5 mile west of San Dimas, on northwest slope of prominent hill upon which the San Dimas Reservoir is situated, 30 feet south of Gladstone Ave. extended, 30 feet south of wire fence, 250 feet east of road leading around base of hill, reference mark is 28.2 feet north of station in fence line; station and reference marks are standard disks set in concrete	Station mark = 976.419 Reference mark = 963.571
Triangulation station Rock, about 1 mile north and 0.75 mile west of San Dimas, near north edge of San Dimas Wash, about 800 feet west of Amelia Ave., 100 feet south of an orange grove, reference mark is 105 feet north of station; station and reference marks are standard disks set in concrete	Station mark = 916.789 Reference mark = 918.010
San Dimas, 1 mile north and 0.1 mile east of, on Foothill Bvd., 20 feet east of center line and 200 feet north of point where boulevard turns eastward; concrete post with disk in top (U. S. C. & G. S. b. m. Y–35)	999.325
San Dimas, in north face of San Dimas Garage on West Bonita St.; brass disk (U. S. C. & G. S. b. m. V–35)	954.529
San Dimas, in center of south face of A. A. Neher Block on West Bonita St.; brass disk (U. S. C. & G. S. b. m. W–35)	950.195
San Dimas, in east face of northernmost of two buildings of Grammar School, 13 feet north of southeast corner; brass disk (U. S. C. & G. S. b. m. X–35)	938.013
San Dimas, 1 mile north and 0.8 mile east of, 300 feet north of Foothill Bvd., 23 feet west of center line of Artesia St.; concrete post with disk in top (U. S. C. & G. S. b. m. A–36)	1,061.100
Triangulation station Garrett, about 1.5 miles west and 1.5 miles north of La Verne, 100 feet northeast of junction of Base Line Road and Foothill Bvd., at north edge of Base Line Road, 1 foot north of a stone wall; standard disk station mark set in concrete (U. S. C. & G. S. b. m.)	1,113.954
La Verne, about 1.2 miles west and 1.5 miles north of, 0.2 mile west of La Verne Heights School, 375 feet west of Wheeler and Wilson Road, 10 feet north of center line of Base Line Road; concrete post with disk in top (U. S. C. & G. S. b. m. Z–35)	1,156.691
Triangulation station Bridge, about 1.5 miles due north of La Verne, 16 feet north of center line of Base Line Road, 0.3 mile west of point where there is a southward jog in road; standard disk station mark set in concrete (U. S. C. & G. S. b. m.)	1,181.002
Triangulation station Foot, about 1.5 miles north and 0.2 mile east of La Verne, at north edge of Base Line Road at a point where it jogs southward; standard disk station mark set in concrete (U. S. C. & G. S. b. m.)	1,235.326
Triangulation station Reynolds, about 1.5 miles north and 0.2 mile east of La Verne, 0.3 mile west of Williams Ave. at south edge of Base Line Road where it makes a northward jog; standard disk station mark set in concrete (U. S. C. & G. S. b. m.)	1,214.492
Triangulation station Hill, about 1.5 miles north and 0.6 mile east of La Verne, 450 feet east of Williams Ave., 20 feet south of center line of Base Line Road; standard disk station mark set in concrete (U. S. C. & G. S. b. m.)	1,283.190

	Feet
Triangulation station Malone, 1 mile north and 1 mile west of high school at Claremont, 200 feet south of point where Base Line Road turns south at Live Oak Canyon, 11 feet west of center line of road; standard disk station mark set in concrete (U. S. C. & G. S. b. m.)	1,341.333
Triangulation station French, 1 mile north and 1 mile west of high school at Claremont, 3 feet north of westward extension of center line of Base Line Road where it turns south along Live Oak Canyon, 3 feet east of edge of a bluff; standard disk station mark set in concrete (U. S. C. & G. S. b. m.)	1,345.647
Claremont, 1 mile north and one-third of a mile west of high school, on property belonging to Adolph Bernard, 9 paces south of Base Line Road and 11 paces west of Indian Hill Road; concrete post with disk in top (U. S. C. & G. S. b. m. D–36)	1,394.823
Claremont, 1 mile north and 0.5 mile west of high school, on property owned by Johnson Bros., on east side of a 150-foot circular concrete reservoir, 160 feet south of Base Line Road, about 1,300 feet west of Indian Hill Road; brass disk (U. S. C. & G. S. b. m. F–36)	1,374.791
Triangulation station Pate, 1 mile north and 1.5 miles east of high school, 0.2 mile west of county line, 80 feet east of a road running north, about 11 feet north of center line of Base Line Road standard disk station mark set in concrete (U. S. C. & G. S. b. m.)	1,518.324
Triangulation station East Base, 1 mile north and 2 miles east of high school at Claremont, 0.25 mile east of a well-defined wash which marks the boundary between Los Angeles and San Bernardino counties, 115 feet south of Base Line Road, 80 feet west of old wagon road; standard disk station mark set in concrete (U. S. C. & G. S. b. m.)	1,550.085
Triangulation station East Base 2, station is 265 feet S. 17° W. of East Base, described above; standard disk station mark set in concrete (U. S. C. & G. S. b. m.)	1,540.328
Upland, 1 mile west of, 2.1 miles north of Valley Bvd., on west side of Mountain Ave., in center of south end of a concrete culvert, 42 feet south of south rail of Atchison, Topeka & Santa Fe Ry.; concrete post with disk in top (U. S. C. & G. S. b. m. K–36)	1,220.247
Ontario, in southeast corner of Franklin Building on Euclid Ave.; brass disk (U. S. C. & G. S. b. m. M–36)	997.655
Ontario, in west face of City Hall, 1.2 feet from northwest corner and 4 feet above pavement; 2-inch brass disk (city bench mark) (U. S. C. & G. S. b. m. N–36)	995.470
Ontario, on Main Ave., in northwest corner of building formerly occupied by a bank; Geological Survey bronze tablet stamped "987" (U. S. C. & G. S. b. m. O–36)	988.466
Ontario, about 3 miles west of, in north end of east abutment of a concrete culvert on Los Angeles & Salt Lake R. R., 19 paces east of milepost 35.04, 5.7 feet north of north rail; brass disk (U. S. C. & G. S. b. m. L–36)	945.366
Pomona, 55 feet from Southern Pacific R. R. station, near a telegraph pole near the park hedge; Geological Survey iron post stamped "861" (U. S. C. & G. S. b. m. P–36)	862.364

	Feet
Pomona, in east face of J. H. Graeber Building, at corner of railroad reservation and Gordon St.; Geological Survey bronze tablet stamped "861" (U. S. C. & G. S. b. m. Q–36)	862.646
Pomona, corner of Second and Ellen streets, in Ellen St. side of Odd Fellows Building, 11.6 feet from Second St. corner; Geological Survey bronze tablet stamped "854" (U. S. C. & G. S. b. m. R–36)	855.746
Pomona, in south side of City Hall, 12.8 feet east of entrance; brass disk (U. S. C. & G. S. b. m. S–36)	853.755

From center of east line of El Monte 6′ quadrangle in adjacent 1° area along Southern Pacific R. R. east and northeast to Pomona, thence east to Ontario (double-rodded line by H. S. Crowe, 1897, fitted to U. S. C. & G. S. elevations at Pomona and Ontario and a weighted elevation for Puente)

NOTE.—The error adjusted between Puente and Pomona is 0.526 foot, which is very large. The line should therefore be releveled and compared with the printed elevations in Bulletin 342, page 63, after applying local correction to Spadra, which should read 710.506.

Bassett, 86.7 feet from west end of platform and 107.7 feet south from southwest corner of station; iron post stamped "295"	295.740
Puente, north of station, 125 feet north of east end of platform, 18 feet west of turnstile in fence; iron post stamped "328"	328.859
Puente warehouse, 1.4 feet from northwest corner and 1.2 feet below brick foundation; bronze tablet stamped "331"	331.996
Lemon, 113.2 feet from southwest corner of station, in southeast corner of fence of railroad reservation; iron post stamped "519"	520.315
Spadra, 122.4 feet from northwest corner of station; iron post stamped "710"	711.094
Pomona, 55 feet from station, near telegraph pole near park hedge; iron post stamped "861" (U. S. C. & G. S. b. m. P–36)	862.364
Ontario, in grass plot in front of station, 79.2 feet south of southwest corner of station; iron post stamped "986"	987.011
Ontario, in southwest corner of Southern Pacific Hotel on west side of building, seventh course of brick from sidewalk and two courses from doorway; bronze tablet stamped "992"	992.951
South Cucamonga (Zucker), in station park, 45.1 feet from southeast corner of station, 2.6 feet from telegraph pole; iron post stamped "958"	959.133
South Etiwanda, 58.6 feet south of center of wagon road, and 2.6 feet west of telegraph pole; iron post stamped "981"	982.652

Primary leveling by C. W. H. Nessler in 1923

From El Monte 6′ quadrangle in adjoining 1° area east along Union Pacific R. R. to Puente

Hill Grove, 1 mile west of, at northeast end of steel railroad bridge over San Jose Creek, in west end of concrete retaining wall; metal plug marked "U. S. 290.6 B. M."	290.60
Reference mark, 35 feet northeast of b. m.; white square painted on southwest corner of foundation for crossing signal	309.97
Hill Grove, 0.25 mile west of, 55 feet southwest of Seventh St. and Union Pacific crossing, 50 feet south of track, on south edge of right of way, in concrete post; bronze tablet stamped "M 3 1923"	309.941
Hill Grove, in front of station; top of rail	310.7

	Feet
Hill Grove, 0.3 mile east of, 300 feet east of road crossing, on south side of Union Pacific track, in west end of concrete culvert; chiseled square, marked "U. S. 311.2 B. M."	311.28
Puente, 0.7 mile west of, on southeast corner of concrete base for Southern Pacific semaphore 5000; painted white square	311.43

Primary leveling by H. S. Senseney in 1923

From Puente north along highway through Puente and Duarte 6′ quadrangles to Azusa

Puente, 1 mile north of, on west side of Glendora Ave., at road forks, in concrete head gate; chiseled square, marked "U. S. B. M. 328.3"	328.49
Puente, 1.6 miles north of, on west side of Glendora Ave., at Cameron Ave., 6 feet east of head gate, in curb; chiseled square, marked "U. S. B. M. 334.2"	334.46
Puente, 2.1 miles north of, at northwest corner of Glendora and Francisquito avenues, in curb; chiseled square, marked "U. S. B. M. 346.9"	347.10
Puente, 2.7 miles north of, in southwest corner of Glendora and Merced avenues, where Merced Ave. turns west, in concrete post; bronze tablet stamped "S–54–1923"	371.186
Puente, 2.7 miles north of, on east side of Glendora Ave., 45 feet south of where Merced Ave. turns west, in curb; chiseled square	370.57
Puente, 3.8 miles north of, on Glendora Ave., in southwest corner of concrete bridge over Walnut Creek; chiseled square, marked "U. S. B. M. 408.2"	408.41
Puente, 4.5 miles north of, at northwest corner of Lark Ellen and Arroyo boulevards, in curb; chiseled square, marked "U. S. B. M. 431.0"	431.20
Puente, 5.6 miles north of, 2 miles west of Covina, 25 feet south by 25 feet west of intersection of Lark Ellen and Covina boulevards, in concrete post; bronze tablet stamped "S 55 1923"	463.130
Puente, at southeast corner of Lark Ellen and Covina boulevards, in curb; chiseled square	463.41
Covina, 1 mile northwest of, 1.5 miles south of Azusa, at northeast corner of Azusa and Cypress avenues, in curb; chiseled square, marked "U. S. B. M. 502.5"	502.67
Azusa, 0.5 mile south of, at northeast corner of Azusa Ave. and Walnut St., in concrete culvert; chiseled square, marked "U. S. B. M. 515.6"	515.82
Azusa, 55 feet north by 25 feet west of intersection of Azusa Ave. and First St., in concrete post; bronze tablet stamped "S 56 1923"	543.456
Azusa, at northeast corner of Azusa Ave. and First St., at fire hydrant, in curb; chiseled square	542.61
Azusa, at intersection of Azusa Ave. and Center St., on south side of War Memorial, in first concrete step; chiseled square	606.688

From point northwest of Covina east along highways in Duarte and Glendora 6′ quadrangles to San Dimas

Covina, 0.5 mile north of, at northeast corner of Citrus and Cypress avenues, in curb; chiseled square marked "U. S. B. M. 565.4"	565.55

	Feet
Covina, 1 mile north by 1 mile east of, at southwest corner of Section Center and Grand avenues, in curb; chiseled square marked "U. S. B. M. 637.5"	637.73
Covina, 1 mile north by 2 miles east of, 20 feet north by 35 feet east of intersection of Section Center and Bonnie Cove avenues, in concrete post; bronze tablet stamped "S 58 1923"	710.780
Covina, at northeast corner of Section Center and Bonnie Cove avenues, in curb; chiseled square	710.24
Covina, 1 mile north by 3 miles east of, at northwest corner of Section Center and Valley Center avenues, in curb; chiseled square marked "U. S. B. M. 782.7"	782.92
Covina, 1 mile north by 4 miles east of, on north side of Section Center Ave., 300 feet east of Amelia Ave., in east end of driveway to Pinehurst; chiseled square, marked "U. S. B. M. 854.6"	854.79
San Dimas, 200 feet west of depot, 2.4 feet south of south curb of Bonita Ave., in concrete post; bronze tablet stamped "S 59 1923"	940.250
San Dimas, 90 feet west of b. m. "S. 59," in south curb of Bonita Ave.; chiseled square	939.68

From San Dimas along highways east and south to Pomona, in Glendora, La Verne, and Claremont 6′ quadrangles

San Dimas, 1 mile east of, at northwest corner of Bonita and Artesia avenues, in top of stump; copper nail and washer, marked "U. S. B. M. 1,015.0"	1,015.27
La Verne, at northwest corner of West Third St. and north-south road, on city corporation line, in curb; chiseled square, marked "U. S. B. M. 1,038.1"	1,038.34
La Verne, 65 feet southwest of intersection of Third and D streets in northeast corner of grounds of La Verne College, in concrete post; bronze tablet stamped "S 60 1923"	1,050.462
La Verne, 65 feet northeast of b. m. S–60, on south side of and in base of flagpole; chiseled square	1,051.68
Pomona, on north side of Pomona Ave., 50 feet west of Cucamonga St., in concrete culvert; chiseled square marked "U. S. B. M. 1,034.2"	1,034.47
Pomona, at southwest corner of Gavey and Park avenues, at telephone pole, in curb; chiseled square marked "U. S. B. M. 947.9"	948.15
Pomona, at southeast corner of Garey Ave. and Pearl St., at telephone pole, in curb; chiseled square marked "U. S. B. M. 885.0"	885.28

From Covina southeast along highways in Covina and Claremont 6′ quadrangles to Pomona

Covina, 1 mile east of, at southeast corner of Grand and Badillo avenues, in curb; chiseled square marked "U. S. B. M. 588.5"	588.80
Covina, 1.7 miles southeast of, on west side of Pomona Hill Road, at road forks, in standpipe; chiseled square marked "U. S. B. M. 523.3"	523.58
Covina, 2.6 miles southeast of, on north side of Pomona Hill Road, about 0.25 mile east of residence of C. A. Timmons, at top of hill, in concrete post; bronze tablet stamped "S 74 1923"	657.013
Covina, 100 feet west of bench mark S–74, on north side of road; top of iron pipe	652.08

	Feet
Covina, 3.6 miles southeast of, on south side of road, at top of divide, in forks of eucalyptus tree; copper nail and washer marked "U. S. B. M. 895.1"	895.47
Covina, 4.3 miles southeast of, at summit of road over San Jose Hills, on south side of road in concrete post; bronze tablet stamped "S–75–1923"	1,039.593
Covina, 22 feet west of bench mark S–75, in forks of eucalyptus tree; copper nail and washer	1,040.58
Covina, 4.8 miles southeast of, on south side of road, 115 feet west of gate, in root of large maple tree; top of spike marked "U. S. B. M. 810.6"	810.94
Pomona, 3.5 miles west of, on south side of hill road to Covina, in root of tree; copper nail and washer marked "U. S. B. M. 771.1"	771.47
Pomona, 2.5 miles west of, on south side of Valley Bvd., 90 feet east of railroad crossing, in concrete post; bronze tablet stamped "S 76 1923"	773.352
Pomona, 110 feet west of bench mark "S 76," in concrete base of warning signal; chiseled square	771.00
Pomona, at railroad crossing, at Southern Pacific milepost 513, in concrete base of semaphore 5129; head of nail, marked "U. S. B. M. 820.1"	820.45
From Azusa west along highways through Duarte quadrangle to Monrovia	
Azusa, 720 feet east of city limits, on north side of Foothill Bvd., at northeast corner of road north, in concrete culvert; chiseled square, marked "U. S. B. M. 591.8"	591.99
Azusa, 2.6 miles west of, 35 feet north by 20 feet east of intersection of Foothill Bvd. and Fish Canyon Road, in concrete post; bronze tablet stamped "S. 57 1923"	579.959
Azusa, at northeast corner of Foothill Bvd. and Fish Canyon Road, in telephone pole; railroad spike	579.06
Duarte, at northeast corner of Foothill Bvd. and Highland Ave., in concrete culvert; chiseled square, marked "U. S. B. M. 535.5"	535.72
Duarte, 1.1 miles west of, at southwest corner of Huntington Drive and Mountain Ave., in base of standpipe; chiseled square marked "U. S. B. M. 524.9"	525.14
From Azusa along highways east and south to point near San Dimas	
Azusa, 1 mile east of, at northwest corner of Foothill Bvd. and Citrus Ave., in concrete culvert; chiseled square, marked "U. S. B. M. 627"	627.32
Glendora, 0.7 mile west of, at southeast corner of Foothill Bvd. and private road south to residence of D. M. Sutherland, in root of cedar tree; copper nail and washer, marked "U. S. B. M. 702.4"	702.60
Glendora, at northeast corner of Foothill Bvd. and Michigan Ave., in curb; chiseled square	772.21
Glendora, at northwest corner of City Hall, in concrete post; bronze tablet stamped "S 61 1923"	775.987
Glendora, at southeast corner of Foothill Bvd. and Lorraine Ave., in concrete culvert; chiseled square, marked "U. S. B. M. 857.6"	857.92

	Feet
Glendora, 1 mile east of city limits, on Foothill Bvd., in southeast corner of crossroads, in concrete culvert; chiseled square	903.34
New reference bench mark, 50 feet northeast of post	980.01
Glendora, 2.5 miles east of, 85 feet north of private entrance to J. B. Coulston ranch, where Foothill Bvd. turns southward, 2 feet south by 2 feet west of corner post of National Forest Boundary, in concrete post; bronze tablet stamped "S 62 1923"	985.585
Glendora, 2.5 miles east by 0.5 mile south of, at northwest corner of Foothill Bvd. and Alosta Ave., in base of gas pump; chiseled square, marked "U. S. B. M. 951.0"	951.30

DEGREE QUADRANGLE 34°–35°, 118°–119°

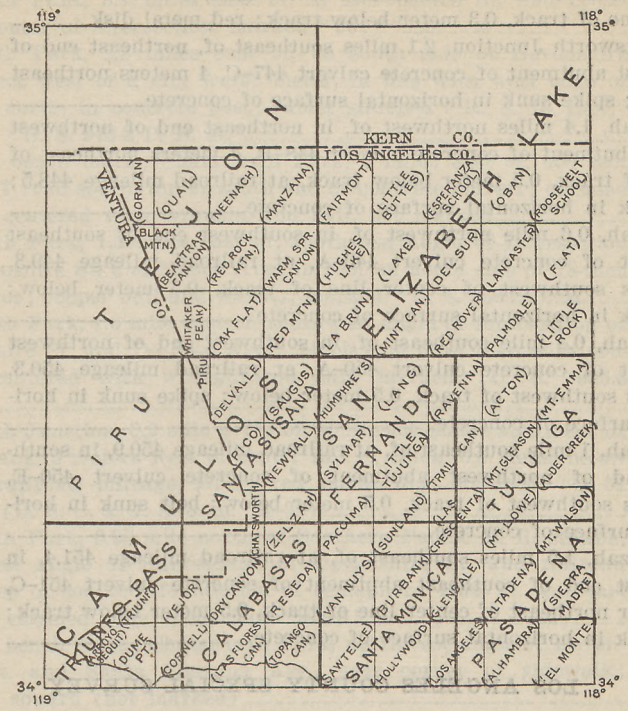


FIGURE 14.—Diagram of degree quadrangle 34°–35°, 118°–119°

CALABASAS QUADRANGLE

[Latitude 34°–34° 15′; longitude 118° 30′–118° 45′]

LOS ANGELES AND VENTURA COUNTIES

Primary leveling by H. S. Crowe in 1900

From Encino west along Chatsworth Park branch railroad to Canoga, thence north to Chatsworth

	Feet
Reseda, 2.7 miles west of, 40 feet west of center of county road, near first telegraph pole west of road crossing, 50 feet south of track; iron post stamped "773 L. A."	774.269

From point near Canoga southwest along road to Grape Arbor

Calabasas, 38 feet east of northeast corner of calaboose building, at southeast corner of picket fence around vineyard, 60 feet northwest of west end of bridge; iron post stamped "928 L. A."	929.126
T. 1 N., R. 17 W., sec. 31, 4 feet north of southwest corner; iron post stamped "694 L. A."	695.258

Precise leveling by U. S. Coast and Geodetic Survey in 1920

From Santa Susana quadrangle along Southern Pacific R. R. south to Chatsworth, thence southeast into Santa Monica quadrangle

	Feet
Q–31, Chatsworth Junction, 0.2 mile north of, at railroad mileage 445.3, southeast center abutment of water tank, 5 meters west of center line of track, 0.3 meter below track; red metal disk	976.330
R–31, Chatsworth Junction, 2.1 miles southeast of, northeast end of northwest abutment of concrete culvert 447–C, 4 meters northeast of track; spike sunk in horizontal surface of concrete	863.761
S–31, Zelzah, 1.4 miles northwest of, in northeast end of northwest middle abutment of concrete culvert 448–B, 4 meters northeast of center of track, 0.5 meter below track, at railroad mileage 448.5; nail sunk in horizontal surface of concrete	827.111
T–31, Zelzah, 0.6 mile northwest of, in southwest end of southeast abutment of concrete culvert 449–A, at railroad mileage 449.3, 4 meters southwest of center line of track, 0.5 meter below; nail sunk in horizontal surface of concrete	808.922
U–31, Zelzah, 0.4 mile southeast of, in southwest end of northwest abutment of concrete culvert 450–A, at railroad mileage 450.3, 4 meters southwest of track, 0.5 meter below; spike sunk in horizontal surface of concrete	802.613
V–31, Zelzah, 1 mile southeast of, at railroad mileage 450.9, in southwest end of northwest abutment of concrete culvert 450–E, 4 meters southwest of track, 0.5 meter below; bolt sunk in horizontal surface of concrete	797.075
W–31, Zelzah, 1.5 miles southeast of, at railroad mileage 451.4, in northeast end of southeast abutment of concrete culvert 451–C, 0.4 meter northeast of center line of track, 0.5 meter below track; bolt sunk in horizontal surface of concrete	798.522

LOS ANGELES COUNTY SPECIAL SURVEY

CALABASAS AND SANTA SUSANA QUADRANGLES

[Latitude 34°–34° 30′; longitude 118° 30′–118° 45′]

Primary leveling by R. B. Steele in 1924

From Pacoima 6′ quadrangle west along highways through Zelzah 6′ quadrangle to Chatsworth 6′ quadrangle (an error of 0.404 foot has been adjusted in this line)

	Feet
San Fernando, 4.5 miles west of, southwest angle of intersection of Chatsworth and Louise streets, on concrete box surrounding irrigation hydrant, at north edge of top; painted square, marked "U. S. 989.3 B. M."	989.03
Reference bench mark; San Fernando, 5.25 miles west of, at intersection of Chatsworth St. and Zelzah Ave., 20 feet south of P. B. M. R. S. 15; 2-inch iron pipe filled with concrete and centered with nail (not marked)	1,032.16
San Fernando, 5.25 miles west of, at intersection of Chatsworth St. and Zelzah Ave.; iron post stamped "1,031 L. A. R. S. 15 1924," marked "U. S. 1,032.3 P. B. M."	1,032.051
San Fernando, 6.0 miles west of, northeast angle of intersection of Zelzah Ave. and Devonshire St., at street marker; top of 4 by 4 inch post centered with nail, marked "985.8"	985.53

Feet

Chatsworth Park, 4.0 miles east of, north side of intersection of Devonshire St. and Reseda Ave.; 2-inch iron pipe filled with concrete, centered with wrought-iron nail. marked "U. S. 987.3 B. M."---------- 986.92

Chatsworth Park, 3.4 miles east of, at Devonshire St. and cross-road; center of intersection, marked "964.8"---------- 964.46

Chatsworth Park, 2.5 miles east of, on south side of Devonshire St., 4 feet west of a city water meter, in line with west edge of T road north, in concrete post; tablet stamped "R. S. 16 1924," marked "U. S. 973.2 P. B. M."---------- 972.764

Reference bench mark; Chatsworth Park, 2 miles east of, 400 feet east of T road south, top of south end of concrete culvert; chiseled square, centered with wrought-iron nail, not marked---------- 950.38

Chatsworth Park, 1.5 miles east of, southwest angle of intersection of Devonshire St. and Mason Ave., in root on north side of 18-inch cedar tree; copper nail and washer, marked "U. S. 956.2 B. M."--- 955.72

Chatsworth Park, 1.0 mile east of, southwest angle of intersection of Devonshire St. and De Soto Ave.; 2-inch iron pipe filled with concrete, centered with wrought-iron nail, marked "U. S. 955.5 B. M."---------- 954.98

Chatsworth Junction, 0.2 mile north of, southeast center abutment of water tank, 5 meters west of center line of track, 0.3 meter below track, railroad mileage 445.3; red metal disc stamped "Q 31 1920" (U. S. C. & G. S. b. m. Q–31)---------- 976.330

Chatsworth Park, 0.25 mile north of Southern Pacific R. R. station, northwest angle of intersection of Devonshire St. and railroad track, top of concrete foundation of semaphore 4452, at southeast corner; chiseled square, marked "978.5"---------- 977.99

Reference bench mark; Chatsworth Park, northwest angle of Devonshire St. and Santa Susanna Ave., near corner of sidewalk; chiseled square (not marked)---------- 962.53

Chatsworth Park, at southeast corner of Chatsworth School building, in concrete post; bronze tablet stamped "R. S. 17 1924," pole at street corner painted "U. S. 964.3 P. B. M."---------- 963.772

From Chatsworth along highways southwest and south to Calabasas, thence east to Encino

Chatsworth Park, 0.5 mile south of, northeast angle of intersection of Santa Susanna Ave., and Lassen St., west side of 36-inch oak tree, in root; copper nail and washer, marked "935.0"---------- 934.46

Chatsworth Park, 1.5 miles southwest of, 500 feet south of main entrance to Oakwood Cemetery, on east side of road, on large boulder; chiseled square, marked "U. S. 966.6 B. M."---------- 966.08

Chatsworth Park, 2.0 miles southwest of, at intake of Chatsworth Reservoir, top of concrete head wall of intake, at west end; chiseled square, marked "U. S. 929.5 B. M."---------- 928.97

Chatsworth Park, 2.5 miles southwest of, 0.5 mile southwest of intake of Chatsworth Reservoir, 260 feet northwest of road fork, near abandoned ranch house, in center of road entrance to ranch, on boulder; chiseled square, marked "907.3"---------- 906.77

Chatsworth Park, 2.75 miles southwest of, near northwest corner of Chatsworth Reservoir, about 380 feet southeast of gate, at angle in reservoir fence line, in concrete post; bronze tablet stamped "R. S. 18 1924," marked "U. S. 885.6 P. B. M."---------- 885.066

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	Feet
Reference bench mark; Chatsworth Park, 2.75 miles southwest of, near northwest corner of Chatsworth Reservoir, about 380 feet northeast of "P. B. M. R. S. 18–1924," at gate, on boulder; chiseled square (not marked)	887.88
Chatsworth Park, 3.5 miles southwest of, 0.5 mile west of Chatsworth Reservoir, on west side of Y road forks, on large boulder; chiseled square, marked "U. S. 896.7 B. M."	896.14
Chatsworth Park, 4.25 miles southwest of, near southwest corner of Chatsworth Reservoir, on west side of road, 15 feet north of gate in east-west fence line, on boulder; chiseled square, marked "913.8"	913.27
Owensmouth, 4.0 miles northwest of, at intersection of Cohasset and Roscoe streets, 40 feet southeast of street marker, top of east edge of concrete irrigation pipe; chiseled square, marked "U. S. 901.1 B. M."	900.60
Owensmouth, 3.5 miles west of, on east side of intersection of Cohasset and Stagg streets, top of south side of concrete irrigation pipe; chiseled square, marked "U. S. 879.4 B. M."	878.92
Owensmouth, 4.0 miles west of, on north side of intersection of Breckenridge St. and Rainbow Drive, at pass in ridge, at entrance to residence, on bottom concrete step; chiseled square, marked "1,015.3"	1,014.94
Reference bench mark; Owensmouth, 4.5 miles west of, 0.25 mile north of Bell Canyon, 200 feet southwest of gate entrance to old Escorpion Rancho, 200 feet southwest of P. B. M. "R. S. 19–1924," north side of 6-inch oak tree, in root; copper nail and washer, not marked	937.06
Owensmouth, 4.5 miles west of, 0.25 mile northeast of Bell Canyon, on north side of gate entrance to old Escorpion Rancho, 50 feet west of main road, in concrete post; bronze tablet stamped "R. S. 19 1924," marked "U. S. 938.5 P. B. M."	938.052
Calabasas, 3.4 miles northwest of, 0.5 mile south of Bell Canyon, 300 feet north of T road east, 20 feet east of north-south road, at west edge of George E. Platt Co.'s ranch, on west side of 40-inch oak tree, in root; copper nail and washer, marked "U. S. 896.0 B. M."	895.55
Calabasas, 2.2 miles northwest of, 0.5 mile east of Goodall ranch house, on old Escorpion grant line, 20 feet north of present road; top of 2-inch iron pipe, marked "U. S. 882.9 B. M."	882.40
Calabasas, 1.4 miles northwest of, at intersection of crossroads, in pasture, 0.25 mile west of a walnut grove; top of stone in place (not marked)	868.50
Calabasas, 1.1 miles northwest of, at southwest corner of walnut grove, 50 feet north of T road east; 8-inch iron pipe filled with concrete and centered with nail, stamped "12" (not marked)	879.80
Calabasas, 0.5 mile north of, 300 feet north of crossing of road and Arroyo Calabasas, where irrigation pipe crosses, on west side of arroyo; top of 8-inch pipe filled with concrete and centered with nail, marked U. S. 905.3 B. M."	904.91
Reference bench mark; Calabasas, 250 feet southwest of general store, center of concrete highway; chiseled square (not marked)	928.39
Calabasas, on east side of concrete highway, at northeast corner of general store, in concrete post 2 inches below ground surface; bronze tablet stamped "R. S. 20 1924," marked "U. S. 928.9 P. B. M."	928.516

	Feet
Calabasas, 1.0 mile northeast of, 300 feet east of intersection of Ventura Bvd. and Gomeres Road, at west edge of town of Girard, 40 feet south of telephone pole 36–28, 1 foot north of south edge of pavement, on concrete highway; chiseled square, marked "U. S. 896.2 B. M."	895.83
Calabasas, 1.8 miles northeast of, northeast angle of intersection of Ventura Bvd. and Shoup Ave., on southwest corner of concrete foundation of lamp post; chiseled square, marked "U. S. 874.8 B. M."	874.42
Calabasas, 2.4 miles northeast of, 100 feet east of intersection of Ventura Bvd. and Don Pio Road, center of culvert on concrete highway; chiseled square, marked "891.3"	890.98
Reference bench mark; Calabasas, 2.75 miles east of, intersection of Ventura Bvd. and Canoga Ave., top of concrete head wall of culvert; chiseled square, centered with nail (not marked)	894.77
Calabasas, 2.75 miles east of, northeast angle of intersection of Ventura Bvd. and Canoga Ave., in concrete post; bronze tablet stamped "R. S. 21 1924," marked "U. S. 894.9 P. B. M."	894.556
Calabasas, 3.75 miles east of, at summit of Chalk Hill grade, center of concrete highway; chiseled square, "U. S. 982.6 B. M." punched on highway signpost	982.43
Calabasas, 4.35 miles east of, at east base of Chalk Hill grade, center of culvert on concrete highway; chiseled square, marked "834.6"	834.23
Calabasas, 4.8 miles east of, at entrance to Knollgrove ranch, top of south head wall of concrete culvert; chiseled square, marked "U. S. 838.7 B. M."	838.34
Calabasas, 5.5 miles east of, 200 feet east of intersection of Ventura Bvd. and Tampa Ave., center of culvert on concrete highway; chiseled square, marked "U. S. 786.9 B. M."	786.56
Calabasas, 5.75 miles east of, center of intersection of Ventura Bvd. and Topeka Drive, center of concrete highway; chiseled square, marked "U. S. 796.3 B. M."	796.02
Calabasas, 6.4 miles east of, 140 feet west by 35 feet north of intersection of Ventura Bvd. and Reseda Ave., 3 feet north of telephone pole, in concrete post; bronze tablet stamped "R. S. 22 1924," marked "U. S. 786.8 P. B. M."	784.479
Reference bench mark; Calabasas, 6.4 miles east of, on south side of intersection of Ventura Bvd. and Reseda Ave., on concrete foundation of lamp post; chiseled square (not marked)	785.04
Calabasas, 7.0 miles east of, intersection of Ventura Bvd. and Lindley Ave., center of concrete highway; chiseled square, marked "813.4"	813.14
Calabasas, 7.5 miles east of, 230 feet east by 20 feet north of intersection of Ventura Bvd. and Yarmouth Ave., top of concrete milepost; chiseled square, marked "U. S. 800.1 B. M."	799.79
Calabasas, 8 miles east of, at intersection of Ventura Bvd. and Louise Ave., center of concrete highway; chiseled square, marked "814.8"	814.62
Calabasas, 8.5 miles east of, northwest angle of intersection of Ventura Bvd. and Balboa Ave., at telephone pole, in curb; chiseled square, marked "U. S. 770.4 B. M."	770.18
Van Nuys, 2.25 miles south by 2.5 miles west of, intersection of Ventura Bvd. and Havenhurst Ave., at entrance to Encino Country Club, center of concrete highway; chiseled square, marked "750.2"	749.99

	Feet
Reference bench mark; Van Nuys, 2.25 miles south by 2.0 miles west of, northwest corner of Ventura Bvd. and Woodley Ave., in concrete base of lamp post; chiseled square	729.66
Van Nuys, 2.25 miles south by 2.0 miles west of, 25 feet north by 35 feet west of intersection of Ventura Bvd. and Woodley Ave., in concrete post; bronze tablet stamped "A 19 1923"	729.479

From Girard north along highways to Chatsworth

Owensmouth, 1.5 miles south of, southwest angle of intersection of Canoga Ave. and Oxnard St.; top of 2.5-inch iron pipe 2.5 feet high, marked "U. S. 833.1 B. M."	832.67
Owensmouth, 1.0 mile south of, northeast angle of intersection of Canoga Ave. and Topham St; top of 4-inch iron pipe, marked "U. S. 799.3 B. M."	798.78
Owensmouth, northwest angle of intersection of Sherman Way and Canoga Ave., 2 feet southeast of telephone pole, in curb; chiseled square, marked "U. S. 793.8 B. M."	793.27
Reference bench mark; Owensmouth, 0.5 mile north of, northeast angle of intersection of Canoga Ave. and Saticoy St., 3 feet northeast of "P. B. M. R. S. 23 1924"; top of 2-inch iron pipe (not marked)	806.48
Owensmouth, 0.5 mile north of, northeast angle of intersection of Canoga Ave. and Saticoy St., in concrete post; bronze tablet stamped "R. S. 23 1924", marked "U. S. 807.1 P. B. M."	806.555
Owensmouth, 1.3 miles north of, 20 feet west by 50 feet north of intersection of Canoga Ave. and Roscoe St., at water hydrant, in top of 4 by 4 inch post; copper nail, marked "U. S. 839.7 B. M."	839.20
Owensmouth, 1.9 miles north of, northeast angle of road crossing on Canoga Ave.; 2-inch iron pipe filled with concrete, centered with wrought-iron nail, marked "U. S. 865 B. M."	864.99
Owensmouth, 2.4 miles north of, southeast angle of intersection of Canoga Ave. and Nordhoff St.; 2-inch iron pipe filled with concrete, centered with wrought-iron nail, marked "U. S. 888.7 B. M."	888.24
Owensmouth, 3.4 miles north of, 1.0 mile south of Chatsworth, northwest angle of intersection of Owensmouth Ave. and Marilla St., in base of telephone pole; railroad spike, marked "U. S. 934.8 B. M."	934.40

CAMULOS QUADRANGLE

[Latitude 34°–34° 30′; longitude 118° 30′–119°]

LOS ANGELES AND VENTURA COUNTIES

Primary leveling by H. S. Crowe in 1900

From Grape Arbor west along road to Russell Valley, thence north to Simi

	Feet
Russell Valley, 2 miles east of, summit of pass between Vejor and Newbury Park ranch, north side of road where ledge of sandstone appears on surface, in center of most westerly slab of sandstone 10 by 4 by 1.5 feet; bronze tablet stamped "977 L. A."	978.281
Newbury Park ranch, in front of residence of W. H. Crowley, 30 feet south of wagon road, at west corner of fence; iron post stamped "859 L. A."	860.749

	Feet
Summit of pass from Crowley's to Simi, south side of road, in flat sandstone; bronze tablet stamped "1289 L. A."	1,290.486
Simi, 1.3 miles southwest of, 18 feet east of marked corner of sec. 17, T. 2 N., R. 18 W., 24 feet east of center of road at fence post; iron post stamped "730 L. A."	731.453
From Simi northwest along road via Grimes Canyon to Fillmore, thence east along Southern Pacific R. R. to Camulos	
Epworth, 39 feet east of center line of Buena Vista St., at corner of Broadway, 87 feet southeast of southeast corner of fruit packing house; iron post stamped "868 L. A."	869.898
Grimes ranch, sec. 7., T. 3 N., R. 19 W., 600 feet southwest of house, 100 feet east of corral, 30 feet east of small dry wash, 3 feet north of gatepost on wagon road; iron post stamped "642 L. A."	643.562
Fillmore, 125 feet southwest of southwest corner of station, 65 feet southeast of center of railroad and highway crossing, 1.5 feet north of fence corner; iron post stamped "469 L. A." (destroyed)	470.914
Buckhorn, 153 feet northeast of northeast corner of station, 50 feet north of track, 3 feet west of telegraph pole; iron post stamped "599 L. A."	599.493
Camulos, 200 feet south of southeast corner of station, 2.5 feet south of northwest corner of post office; iron post stamped "732 L. A."	732.437
From Fillmore west along Southern Pacific R. R. to Sespe	
Brownstone, in front of station; top of north rail	449.3
Sespe, 1,300 feet north of station, 50 feet south of main entrance to San Cayetano schoolhouse, 1 foot north of fence; iron post stamped "501 L. A."	503.382
Sespe, in front of station; top of north rail	457.0
From Russel ranch west and north in Conejo Valley via Potrero to Somis, thence east to Simi	
Pass from Conejo to Potrero, 150 feet west of road, on slope of rock ledge in field; bronze tablet stamped "1315 L. A."	1,316.549
Guadalasca, El Conejo, and Calleguas grants, joint corner of, 10 feet north of road, in pile of rocks, at summit of ridge; iron post stamped "778 L. A." (moved 26 feet N. E.)	779.904
Somis, 8 feet south of southeast corner of fence around public school, 15 feet west of public road; iron post stamped "288 L. A."	289.760
Moorpark, 20 feet southwest of southwest corner of station, 30 feet north of center of track; iron post stamped "511 L. A." (recovered by C. & G. S., 1920)	513.345

ELIZABETH LAKE QUADRANGLE

[Latitude 34° 30′–35°; longitude 118°–118° 30′]

KERN AND LOS ANGELES COUNTIES

Precise leveling by C. H. Semper in 1902 and L. F. Biggs in 1914

From Mojave quadrangle south along Southern Pacific R. R. to Tujunga quadrangle

	Feet
Semaphore 3851; top of concrete foundation	2,624.70
Milepost 386, opposite; top of rock	2,582.28
Milepost 387, 600 feet north of, at edge of railroad right of way; iron post stamped "2561 B 1902 28"	2,563.290

	Feet
Semaphore 3887 (or 3881?), top of concrete foundation; northwest corner	2,557.60
West side of track; top of rock	2,559.45
Rosamond, 4.4 miles north of, 800 feet north of milepost 390, on west side of track; iron post stamped "2543 B 1902 29"	2,544.822
Milepost 391, near; top of rock	2,505.92
Semaphore 3920, top of concrete foundation; southeast corner	2,462.62
Rosamond, 1.4 miles north of, 800 feet north of milepost 393, west side of track; iron post stamped "2407 B 1902 30"	2,409.401
Semaphore 3947, top of concrete foundation; northwest corner	2,316.04
Lancaster, 9.6 miles north of, 800 feet north of milepost 396, west of track; iron post stamped "2311 B 1902 31"	2,313.379
Semaphore 3978, top of concrete foundation; southeast corner	2,309.67
Concrete culvert 397–D, west side of; point	2,305.25
Lancaster, 6.6 miles north of, 800 feet north of milepost 399, west side of track; iron post stamped "2302 B 1902 32"	2,304.457
Semaphore 3993, top of concrete foundation; northwest corner	2,305.30
Semaphore 4005, top of concrete foundation; northwest corner	2,303.93
Lancaster, 3.6 miles north of, 800 feet north of milepost 402, west side of track; iron post stamped "2302 B 1902 33"	2,304.296
Semaphore 4027, top of concrete foundation; northwest corner	2,316.00
Culvert 403, on west end of; point	2,323.48
Lancaster, 0.6 mile north of, 800 feet north of milepost 405, west side of track; iron post stamped "2335 B 1902 34"	2,336.828
Switch head, 300 feet north of depot at Lancaster	2,355.28
Lancaster, 400 feet west of station, 1 foot from northwest corner of Farmers and Merchants' Bank; bronze tablet stamped "2356 1914 35"	2,356.181
Semaphore 4061, top of concrete foundation; north corner	2,380.52
Culvert 407–B; point on	2,419.50
Palmdale, 5.9 miles north of, east side of track, 800 feet north of milepost 408; iron post stamped "2462 B 1902 36"	2,464.401
Semaphore 4090, top of concrete foundation; southwest corner	2,526.49
Semaphore 4099, top of concrete foundation; northwest corner	2,560.10
Palmdale, 2.9 miles north of, 800 feet north of milepost 411, west side of track; iron post stamped "2592 B 1902 37"	2,593.862
Semaphore 4119, top of concrete foundation; northwest corner	2,613.96
Semaphore 4130, top of concrete foundation; southeast corner	2,630.80
Palmdale, 150 feet north of station, east side of track; iron post stamped "2657 B 1902 38"	2,659.237
Palmdale, 600 feet west and 400 feet north of depot, at south side of east entrance to schoolhouse, set in wall, 5 feet above ground; bronze tablet stamped "2668 1914"	2,668.503
Semaphore 4146, top of concrete foundation; southeast corner	2,725.19
Harold, 165 feet north of water tank, at north end of section house fence; iron post stamped "2824 B 1902 39"	2,826.588
"Harold 1 mile" post; top of iron semaphore box at	2,923.41
Semaphore 4185, top of concrete foundation; northwest corner	3,036.69
Semaphore 4196. top of concrete foundation; southeast corner	3,153.58

Precise leveling along the Los Angeles Aqueduct by the Aqueduct Commission in 1907, adjusted by the U. S. Geological Survey in 1922

Keller's L line, 200 feet northwest of, station 821–50, north side of Antelope Valley; standard L. A. A. pipe No. 85, marked with red, white, and blue flag	3,150.000

	Feet
Keller's L line, 210 feet northwest of, station 981–00, north side of Antelope Valley; standard L. A. A. pipe No. 86, marked with red, white, and blue flag	3,146.926
Keller's L line, 150 feet northwest of, station 1139–00, north side of Antelope Valley; standard L. A. A. pipe No. 87, marked with red, white, and blue flag	3,143.112
Keller's L line, 150 feet north of, station 1263–00, north side of Antelope Valley; standard L. A. A. pipe No. 88, marked with red, white, and blue flag	3,139.875
Keller's L line, 150 feet north of, station 1389–00, north side of Antelope Valley; standard L. A. A. pipe No. 89, marked with red, white, and blue flag	3,131.954
Keller's L line, 100 feet north of, station 1483–50, on ridge at east end of Cottonwood Creek Siphon, north side of Antelope Valley; standard L. A. A. pipe No. 91, marked with red, white, and blue flag	3,134.703
Keller's L line, 80 feet southeast of, station 1516–00, on ridge at west end of Cottonwood Creek Siphon, north side of Antelope Valley; standard L. A. A. pipe No. 91, marked with red, white, and blue flag	3,123.504
Keller's L line, 325 feet north of, station 1557–00 near east portal of tunnel No. 1, on sand hills; standard L. A. A. pipe No. 92, marked with red, white, and blue flag	3,129.832
Keller's L line, 300 feet north of, station 1571–00, between portals of tunnels Nos. 1 and 2, in sand hills; standard L. A. A. pipe No. 93, marked with red and blue flag	3,125.368
Keller's L line, 170 feet north of, station 1609–00, between portals of tunnels Nos. 2 and 3, in sand hills; standard L. A. A. pipe No. 94, marked with red and blue flag	3,142.475
Keller's L line, 220 feet north of, station 1628–00, between portals of tunnels Nos. 3 and 4, in sand hills; standard L. A. A. pipe No. 95, marked with red and blue flag	3,129.314
Keller's L line, 325 feet north of, station 1639–00, between portals of tunnels Nos. 4 and 5, in sand hills; standard L. A. A. pipe No. 96, marked with red and blue flag	3,127.091
Keller's L line, 200 feet north of, station 1662–00, between portals of tunnels Nos. 5 and 6, in sand hills; standard L. A. A. pipe No. 97, marked with red and blue flag	3,132.850
Keller's L line, 200 feet north of, station 1690–00, between portals of tunnels Nos. 6 and 7, in sand hills; standard L. A. A. pipe No. 98, marked with red and blue flag	3,126.257
Keller's L line, 600 feet north of, station 1705–00, between portals of tunnels Nos. 7 and 8, in sand hills; standard L. A. A. pipe No. 99, marked with red and blue flag	3,123.733
Keller's L line, 300 feet north of, station 1723–50, near west portal of tunnel No. 8, in sand hills; standard L. A. A. pipe No. 100, marked with red and blue flag	3,126,389
Keller's L line, 500 feet north of, station 2378–00, south side Antelope Valley; standard L. A. A. pipe No. 107 on knoll, marked with red and blue flag	3,050.019
Elizabeth Lake Tunnel, on hillside northeast of north portal of; standard L. A. A. pipe No. 108, marked with red and blue flag	2,963,098

	Feet
Elizabeth Lake Tunnel, on hillside 55 feet south of shaft entrance to, 5 feet east of hub Q on tunnel line; standard L. A. A. pipe No. 109, marked with red and blue flag	3,285.422
Elizabeth Lake Tunnel, 225 feet south of south portal of, across canyon; standard L. A. A. pipe No. 110, marked with red and blue flag	2,926.016

Precise leveling by L. F. Biggs in 1906

Along Atchison, Topeka & Santa Fe Ry.

Muroc, 8 miles northwest of, 6 feet north of telegraph pole north of milepost 806; iron post stamped "2420"	2,420.755
Bissell, in front of station; top of rail	2,451.0
Mojave, 9 miles southeast of, 6 feet north of pole north of milepost 809; iron post stamped "2462"	2,462.509

Primary leveling by H. S. Crowe in 1900

From Manzana east along road to Fairmont, thence south to Elizabeth Lake, thence southeast to Harold (Alpine)

Fairmont, 300 feet southeast of southeast corner of public schoolhouse, at southeast corner of fence; iron post stamped "2786 L. A"	2,784.828
W. A. Spencer's house, 75 feet southeast from corner of, 1 foot south of fence corner; iron post stamped "2803 L. A"	2,801.951
Pedro Andrada's house, 60 feet north of, 2 feet northeast of signboard at fork of road where it forks east and south; iron post stamped "3403 L. A"	3,401.666
Hill, on slope of, 25 feet south of road; iron post stamped "3177 L. A"	3,175.513
J. G. Ritter's house, 0.5 mile north of, 450 feet north of gate, 12 feet north of road, at summit of ridge at head of valley; iron post stamped "3048 L. A"	3,046.223
Signpost marked "Alpine, 5 miles," 15 feet west of, 100 feet east of road up canyon, 200 feet south of road to Palmdale; iron post stamped "2831 L. A."	2,829.299
Una Lake, sec. 3, lot 8, T. 5 N., R. 12 W., 1.5 feet southeast of southeast corner of bunk house of South Antelope Valley Irrigation Co.; iron post stamped "2820 L. A"	2,820.572
Harold siding (formerly Alpine), 1.5 feet west of northwest corner of fence around railroad section house, 9 feet east of center of track; iron post stamped "2826 L. A." (recovered by U. S. C. & G. S. precise leveling)	2,826.826

From Una Lake southeast to Little Rock

East Palmdale, 0.25 mile south of, in corner of fence, 40 feet north of center of road to Little Rock from East Palmdale, in sec. 6, T. 6 N., R. 11 W., 450 feet northwest of section corner; iron post stamped "2682"	2,682.439
Little Rock, inside of fence at Chaplin ranch, 54 feet east from postoffice building, 25 feet east of quarter corner on west side of sec. 13, T. 5 N., R. 11 W.; iron post stamped "2910"	2,911.049

From Elizabeth Lake southwest to St. Francis ranch

	Feet
P. Andrade's house, 60 feet north of, 2 feet northeast of signboard at forks of road; iron post stamped "3403 L. A." (C. & G. S.)	3,401.666
Juan de Cellis's house, 1 mile south of, at turn of road on top of first hill south of bridge; iron post stamped "2604 L. A." (C. & G. S.)	2,604.057
Canyon, at turn of road in, 15 feet below small ditch where it turns around point of hill; iron post stamped "1913 L. A." (C. & G. S.)	1,914.053

PASADENA QUADRANGLE

[Latitude 34°–34° 15′; longitude 118°–118° 15′]

LOS ANGELES COUNTY

Precise leveling by L. F. Biggs in 1914, fitted to U. S. C. & G. S. precise level line over same route

From Los Angeles south to Clement Junction

	Feet
Los Angeles, at intersection of San Fernando road and Granada St., on north end of west curb; chiseled cross, marked "U. S. B. M."	342.96
Los Angeles, 6 inches from northeast corner of north abutment of Southern Pacific R. R. bridge No. 1 over Los Angeles River; lead plug with copper nail (R. R. bench mark), marked "U. S. B. M."	329.03
Los Angeles, Atchison, Topeka & Santa Fe Ry. bridge 140–A over Los Angeles River, near north end of first pier from west end; lead plug with copper nail marked "U. S. B. M."	311.61
Los Angeles, Junction warehouse, brick building at junction of San Fernando and Olympia streets, in south wall; bronze tablet stamped "306" (recovered by C. & G. S.)	306.450
Los Angeles, Alameda and Alizo streets, intersection point	272.8
Los Angeles, Arcade station, 3 inches north of center post of northwest tower; copper plug set in asphaltum (old p. b. m.), marked "256"	256.293
Los Angeles, Alameda and Fifteenth streets	229.2
Clement Junction, east side of right of way, 500 feet north of railroad tower, at fence intersection; iron post stamped "220 No. 59" (recovered by C. & G. S.)	220.570

Primary leveling by H. S. Crowe in 1897

From Clement Junction north via Los Angeles to Tropico (double-rodded line)

Clement Junction, Los Angeles, 500 feet north of railroad tower, at intersection of fence lines; iron post stamped "220" (recovered by U. S. C. & G. S., 1920)	220.570
Arcade station, 3 inches north of center post of northwest tower; copper plug set in asphaltum, stamped "256"	256.293
Post office, on Main St. between Winston and Fifth streets, in north stone buttress of main entrance; bronze tablet stamped "270"	270.709
City Hall, on Broadway, about 3 feet above the northern steps to front entrance; bronze tablet stamped "286"	286.699
County courthouse, at southeast corner of Broadway and Temple St., in granite buttress on right of main steps to building; bronze tablet stamped "338"	338.592

	Feet
Naud Junction, in concrete floor of alley to waiting room, 4 inches from side of baggage room and 8 inches from edge of concrete nearest railroad track; copper bolt stamped "282"	282.783
Naud Junction, 0.5 mile east of, at Los Angeles River, southwest corner of railroad bridge, in concrete pier; copper bolt stamped "294"	294.640
Junction warehouse, brick building at junction of San Fernando and Olympia streets, in south wall; bronze tablet stamped "306"	306.450
Buena Vista St. bridge over Los Angeles River, 0.5 mile north of station, second bent from south end, 18 feet from California Southern and 12 feet from Southern Pacific railroad tracks, in northeast granite post; copper bolt stamped "314"	314.504

From Los Angeles east along Southern Pacific R. R. to Bassett

East Lake Inn, northeast corner of Eastlake Ave. and Mission Road, on south side of building and 1.2 feet from steps, in concrete at top of foundation; bronze tablet stamped "333"	333.566
Aurant station, 0.75 mile west of, on west side of railroad, in top step of brick culvert; copper bolt stamped "399"	399.476
Shorb station, on south side of railroad yard, 99.5 feet southeast from corner of station, 55 feet west of signal tower; iron post stamped "464"	464.641
Alhambra station, in west corner of railroad park; iron post stamped "456"	456.817
San Gabriel, 85.6 feet from northeast corner, and 94.9 feet from northwest corner of station building, 7.1 feet west from rain-gage post; iron post stamped "415"	416.220
Savannah, 1 foot from fence south of station and 75.9 feet from southeast corner of station; iron post stamped "300"	300.859
Savannah, in Western Union telegraph pole, 73.3 feet north of station; bronze tablet stamped "292" (destroyed)	292.516

LOS ANGELES COUNTY SPECIAL SURVEY

PASADENA, SAN FERNANDO, SANTA MONICA, AND TUJUNGA QUADRANGLES

[Latitude 34°–34° 30′; longitude 118°–118° 30′]

Primary leveling by R. B. Steele in 1924

From Los Angeles courthouse west along Temple St. and Beverly Bvd. to Western Ave. (Preliminary adjustment)

	Feet
Los Angeles County courthouse, at southeast corner of Broadway and Temple St., in granite buttress, on right of main steps to building; bronze tablet stamped "338 U. S. C. & G. S. B. M. S–32"	338,592
Los Angeles, opposite Broadway entrance to county courthouse, in center of concrete sidewalk; bronze tablet	327.256
Los Angeles, southeast corner of Temple St. and Grand Ave., in curb; brass bolt, marked "390.8"	390.88
Los Angeles, 15 feet west of southwest corner of Temple and Figueroa streets, in curb; chiseled square, marked "U. S. 340.3 B. M."	340.38
Los Angeles, northeast corner of Temple and Beaudry streets, at telephone pole, in curb; chiseled square centered with spike, marked "351.7"	351.76

	Feet
Los Angeles, southeast corner of Temple and Boylston streets, at trolley pole, in curb; chiseled square centered with nail, marked "387.9"	388.01
Los Angeles, southwest corner of Temple St. and Edwards Road, at fire hydrant, in curb; chiseled square, marked "U. S. 427.2 B. M."	427.30
Reference bench mark; Los Angeles, southeast corner of Temple St. and Glendale Bvd., in curb; chiseled square	364.85
Los Angeles, 30 feet north of northeast corner of Temple St. and Glendale Bvd., between curb and sidewalk, in concrete post set flush with ground; bronze tablet stamped "R. S. 24 1924," marked "U. S. 364.8 P. B. M."	364.922
Los Angeles, northwest corner of Temple St. and Belmont Ave., at fire hydrant, in curb; chiseled square, marked "395.9"	396.04
Los Angeles, 10 feet west of northwest corner of Temple and North Alvarado streets, in curb; chiseled square centered with nail, marked "U. S. 366.7 B. M."	366.80
Los Angeles, southwest corner of Temple St. and Rampart Bvd., at fire hydrant, in curb; chiseled square, marked "338.5"	338.58
Los Angeles, northeast corner of Temple and Vendome streets, in curb; chiseled square centered with nail, marked "311.3"	311.85
Los Angeles, northeast corner of Temple and Hoover streets, at telephone pole, in curb; chiseled square, marked "U. S. 286.1 B. M."	286.16
Los Angeles, southwest corner of Beverly Bvd. and Juanita Ave., at fire hydrant, in curb; chiseled square, marked "277.4"	277.43
Los Angeles, southeast corner of Beverly Bvd. and Catalina St., at fire hydrant in curb; chiseled square, marked "272.0"	272.00
Los Angeles, southwest corner of Beverly Bvd. and Mariposa St., at power pole, in curb; chiseled square, marked "U. S. 270.1 B. M."	270.07
Los Angeles, 15 feet south of southwest corner of Beverly Bvd. and Western Ave., in curb; chiseled square centered with nail, marked "U. S. 251.4 B. M."	251.36
Los Angeles, southwest corner of Western Ave. and Third St., at fire hydrant, in curb; chiseled square, marked "227.9 U. S. B. M."	227.67
From corner of Temple St. and Glendale Bvd. north along boulevard to Glendale	
Los Angeles, on east side of intersection of Glendale Bvd. and Reservoir St., at overhead crossing of Sunset Bvd., in curb; chiseled square, marked "U. S. 388.2 B. M."	388.30
Los Angeles, northwest corner of Glendale Bvd. and Alvarado St., at telephone pole, in curb; chiseled square marked "415.9"	416.06
Los Angeles, southwest corner of Glendale Bvd. and Allesandro St., in curb; chiseled square, marked "U. S. 475.9 B. M."	476.03
Los Angeles, east side of intersection of Glendale Bvd. and Apex Ave., at summit of pass of Glendale Bvd. in Edendale, at telephone pole, in curb; chiseled square, marked "540.4"	540.60
Los Angeles, northwest corner of Glendale Bvd. and Ayr St., center of return, in curb; chiseled square centered with nail, marked "U. S. 433.0 B. M."	433.09
Los Angeles, northwest corner of Rowena and Lakewood avenues, at intersection of Glendale Bvd., 10 feet south of corner, in curb; chiseled square, marked "U. S. 426.8 B. M."	426.91
Reference bench mark; Los Angeles, northeast corner of Glendale Bvd. and Riverside Drive, in curb; chiseled square, not marked	393.01

	Feet
Los Angeles, northwest corner of Glendale Bvd. and Riverside Drive, between curb and sidewalk, in concrete post; bronze tablet stamped "R. S. 25 1924," marked "U. S. 393.7 P. B. M."	393.759
Los Angeles, southeast corner of Riverside Drive and Los Feliz Road, on north side of 16-inch sycamore tree, in root; copper nail and washer, marked "U. S. 394.8 B. M."	394.80
Glendale (Old Tropico), 500 feet north of Southern Pacific R. R. station, 32.65 feet east of main track (west bound), 22 feet northeast of northeast corner of station platform curbing, 0.3 foot below ground, surrounded by concrete box with cast iron cover; iron post stamped "432 No. 57" (U. S. C. & G. S. b. m. J–32)	432.158
From Figueroa and Temple streets southwest along Figueroa St. to Pico St.	
Los Angeles, southeast corner of Figueroa and —— streets, center of return, in curb; chiseled square, marked "353.9"	353.94
Los Angeles, southeast corner of Figueroa and West Third streets, in curb; chiseled square, marked "U. S. 304.8 B. M."	304.86
Los Angeles, northwest corner of Figueroa and West Sixth streets, center of return, in curb; chiseled square centered with nail (not marked)	299.32
Los Angeles, southwest corner of Figueroa and West Seventh streets, at fire hydrant, in curb; chiseled square (not marked)	273.73
Los Angeles, southwest corner of Figueroa and West Ninth streets, at lamp post; iron nail in curb (not marked)	252.03
Los Angeles, southwest corner of Figueroa and West Eleventh streets, center of return, in curb; chiseled square centered with nail, not marked	238.92
Los Angeles, southwest corner of Figueroa and Pico streets, at fire hydrant, in curb; chiseled square, marked "U. S. B. M. 232.5"	232.60
Los Angeles, at northeast corner of building occupied by Bekins Fireproof Storage Co., at 1335 South Figueroa St., between north wall of building and paving of alley, in concrete post; bronze tablet stamped "S–77–1923"	231.307
From Los Angeles courthouse along highways and Brooklyn Ave. to Evergreen Ave., thence south to Hobart	
Los Angeles, opposite Broadway entrance to county courthouse, in center of concrete sidewalk; bronze tablet	327.256
Los Angeles, northeast corner of Los Angeles and Aliso streets, at fire hydrant, in curb; chiseled square, marked "283.5"	283.46
Los Angeles, southwest corner of Aliso and Vignes streets, at telephone pole, in curb; chiseled square centered with nail, marked "U. S. 275.8 B. M."	275.71
Los Angeles, at east end of Aliso Street bridge over Los Angeles River, center of top of concrete abutment; chiseled square centered with nail, marked "282.1"	282.07
Los Angeles, southwest corner of Brooklyn Ave. and Warren St., in curb; chiseled square, marked "U. S. 356.8"	356.79
Los Angeles, northeast corner of Brooklyn and North Boyle avenues, center of return, in curb; chiseled square, marked "U. S. 349.5 B. M."	349.50

	Feet
Los Angeles, northwest corner of Brooklyn Ave. and North Chicago St., in curb; chiseled square centered with nail, marked "332.5"	332.47
Los Angeles, southwest corner of Brooklyn Ave. and Soto St., at fire hydrant, in curb; chiseled square, marked "U. S. 342.8 B. M."	342.85
Los Angeles, southwest corner of Brooklyn Ave. and North Mott St., in curb; chiseled square centered with nail, marked "333.9"	333.89
Reference bench mark; Los Angeles, northwest corner of Brooklyn and Evergreen avenues, at fire hydrant, in curb; chiseled square, not marked	340.79
Los Angeles, southeast corner of Brooklyn and Evergreen avenues, between curb and sidewalk, in concrete post; bronze tablet stamped "R. S. 26 1924," marked "U. S. 340.6 P. B. M."	340.589
Los Angeles, southeast corner of Evergreen Ave. and First St., at fire alarm box, in curb; chiseled square, marked "306.2"	306.14
Los Angeles, northeast corner of Evergreen Ave. and East Fourth St., at trolley pole, in curb; chiseled square, marked "310.4"	310.37
Los Angeles, northwest corner of Euclid Ave. and Whittier Bvd., at fire hydrant, in curb; chiseled square, marked "U. S. 321.5 B. M."	321.47
Los Angeles, northwest corner of Whittier Bvd. and Lorena St., at lamp post, in curb; chiseled square, marked "U. S. 290.0 B. M."	289.92
Los Angeles, southeast corner of Lorena and Atlantic Sts., at fire hydrant, in curb; chiseled square, marked "238.9"	238.81
Los Angeles, northeast angle of intersection of South Lorena and Alosta Sts., on west side of 48-inch eucalyptus tree, in root; copper nail and washer, tree marked "U. S. 192.4 B. M."	192.24
Hobart, 100 feet south of Atchison, Topeka & Santa Fe Ry. station, west side of track, in concrete base of gate rods; chiseled square, marked "U. S. B. M. 192.0"	191.93
From Brooklyn Ave. northeast along Soto St., northwest along Marengo and Workman streets to Pasadena Ave.	
Los Angeles, northeast corner of North Soto and Fairmount streets, in curb; chiseled square centered with nail, marked "379.8"	379.89
Los Angeles, southeast corner of North Soto and Marengo streets, at power pole, in curb; chiseled square centered with nail, marked "U. S. 345.1 B. M."	345.07
Los Angeles, southeast corner of Marengo and Brittannia streets, 4 feet east of power pole, in curb; chiseled square centered with nail, marked "335.6"	335.60
Reference bench mark; Los Angeles, southwest corner of Mission Road and Marengo St., at power pole, in curb; chiseled square, not marked	321.80
Los Angeles, at Los Angeles County Hospital, northeast corner of Mission Road and Marengo St., between curb and sidewalk, in concrete post; bronze tablet stamped "R. S. 27 1924," marked "U. S. 322.7 P. B. M."	322.609
Los Angeles, southwest corner of Workman and North Main streets, at fire hydrant, in curb; chiseled square, marked "318.9"	318.84
Los Angeles, northeast corner of North Broadway and North Workman streets, at power pole, in curb; chiseled square, marked "U. S. 341.0 B. M."	340.93
Los Angeles, east side of intersection of Pasadena Ave. and North Workman St., at power pole, in curb; chiseled square, marked "378.2"	378.17

From Pasadena west along La Loma Road and Colorado Bvd. to Glendale (leveled twice)

	Feet
Pasadena, 30 feet south by 55 feet east of intersection of Orange Grove Ave. and California St., between curb and sidewalk, set flush in concrete post; bronze tablet stamped "S–64–1923"	828.424
Pasadena, at southwest corner of Orange Grove Ave. and California St., at lamp post, in curb; chiseled square	828.30
Pasadena, southwest corner of La Loma Road and Arroyo Drive, at southeast corner of concrete bridge over Arroyo Seco, top of curb; chiseled square, marked "U. S. 724.0 B. M."	723.89
Pasadena, northwest angle of intersection of San Rafael Ave. and La Loma Road, at city water meter, in curb; chiseled square, marked "U. S. 821.6 B. M."	821.62
Pasadena, intersection of La Loma Road and North Avenue 64, Pacific Electric Ry. track; top of east rail, marked "787.3"	787.21
Pasadena, west limit of, at intersection of Colorado St. and Avenue 64, at Sullivans Gas & Service station, on top of concrete base of delivery pumps, at east end; chiseled square, marked "U. S. 899.6. B. M."	899.50
Eagle Rock, in east edge of, southwest angle of intersection of Colorado and Annandale boulevards, at street marker, in curb; chiseled square, marked "829.6"	829.48
Reference bench mark; Eagle Rock, southeast angle of intersection of Colorado Bvd., and Elmodena and Lauristinis avenues, 2 feet northwest of city water meter, in curb; chiseled square, not marked	714.91
Eagle Rock, southwest angle of intersection of Colorado Bvd. and Lauristinis Ave., between curb and sidewalk, in concrete post; bronze tablet stamped "R. S. 1 1924," marked "U. S. 712.5 P. B. M."	712.241
Eagle Rock, northwest angle of intersection of Colorado and Eagle Rock boulevards, at lamp post, in curb; chiseled square, marked "U. S. 567.2 B. M."	566.80
Eagle Rock, in west edge of, east angle of intersection of Colorado Bvd. and Broadway, at corner light pole, in curb; chiseled square, marked "U. S. 583.5 B. M."	583.07
Glendale, northwest intersection of East Colorado Bvd. and South Verdugo Road, at guy post, in curb; chiseled square, marked "U. S. 568.5"	568.05
Reference bench mark; Glendale, northeast angle of intersection of Colorado Bvd. and Glendale Ave., at telephone pole 209 U. P., in curb; chiseled square, not marked	539.13
Glendale, southeast intersection of Colorado Bvd. and Glendale Ave. between curb and sidewalk, in concrete post; bronze tablet stamped "R. S. 2 1924," marked "U. S. 537.5 P. B. M."	537.040
Glendale, southwest angle of intersection of Glendale Ave. and East Los Feliz Road, at fire hydrant, in curb; chiseled square, marked "U. S. 459.8 B. M."	459.33

From Devil Gate dam along Michigan Ave. to La Canada, thence west and southwest to Glendale

Devils Gate dam, 40 feet northwest of west end of, 2.5 feet east of guardrail, in concrete post; bronze tablet stamped "568 1923"	1,073.648

	Feet
La Canada, 2.0 miles southeast of, on north side of intersection of Michigan Ave. and La Canada St., 4 feet south of telephone pole 14981 T, in curb; chiseled square, marked "U. S. 1,186.9 B. M."	1,186.96
La Canada, 1.0 mile southeast of, southwest angle of intersection of Michigan and Commonwealth avenues, in curb; chiseled square, marked "U. S. 1,251.8 B. M."	1,251.99
Reference bench mark; 58.2 feet southeast of permanent bench mark R. S. 3 1924, north end of concrete culvert under Michigan Ave. top of southwest corner of head wall; wrought-iron spike embedded in concrete	1,364.22
La Canada, northwest angle of intersection of Michigan Ave. and La Canada Bvd. near west edge and 28 feet north of corner of sidewalk, in school yard, in concrete post set flush with ground; bronze tablet stamped "R. S. 3 1924," marked "U. S. 1,365.1 P. B. M."	1,365.458
Montrose, 0.6 mile east of, northeast angle of intersection of Verdugo Bvd. and La Granada St., in curb; chiseled square, marked "U. S. 1,351.8 B. M."	1,352.15
Montrose, northeast angle of intersection of Verdugo Bvd. and Montrose Ave., 8 feet south of highway signboard, in curb; chiseled square, marked "U. S. 1,224.0 B. M."	1,224.20
Montrose, 0.8 mile south of, southeast angle of intersection of Verdugo Canyon Road and Harmon Pl., in Sparr Heights, east head wall of concrete culvert under Verdugo Canyon Road, north end of top; chiseled square, marked "U. S. 1,057.3 B. M."	1,057.37
Reference bench mark; Montrose, 2.0 miles south of, northwest angle of intersection of Verdugo Canyon Road and Opechee Way, 48.15 feet northeast of p. b. m. R. S. 4, in curb; chiseled square, not marked	906.80
Montrose, 2.0 miles south of, southwest angle of intersection of Verdugo Canyon Road and Opechee Way, between curb and sidewalk, in concrete post; bronze tablet stamped "R. S. 4 1924," marked "U. S. 905.3 P. B. M."	905.225
Glendale, in Y of intersection of Verdugo Canyon Road and Canada Bvd., at lamp post, in curb; chiseled square, marked "U. S. 772.4 B. M."	772.77
Glendale, north side of intersection of Verdugo Canyon Road and Glendale Bvd., west end of culvert, top of concrete head wall; chiseled square, marked "U. S. 693.1 B. M."	692.81
Glendale, northwest angle of intersection of North Glendale Ave. and East Doran St., in curb; chiseled square, marked "U. S. 619.7 B. M."	619.40

From La Canada northwest along highways to Mulholland St. and North Sherman Way, thence southwest to Pacoima, thence northwest to San Fernando (first 4.6 miles leveled three times and remainder twice)

La Canada, 0.5 mile northwest of, southeast angle of intersection of Michigan and Burr avenues, south end of culvert under Michigan Ave., top of north wing of concrete head wall; chiseled square, marked "U. S. 1,446.2 B. M."	1,446.65
La Canada, 1.1 miles northwest of, 360 feet east of Olive Grove Ave., near summit of pass, opposite telephone pole 4731 T, in center of Michigan Ave. (concrete road); chiseled square, marked "U. S. 1,549.3 B. M."	1,549.84

	Feet
La Canada, 1.5 miles northwest of, intersection of center lines of Michigan and North Ocean View avenues, center of concrete road; chiseled square, marked "1,497.0"	1,497.45
La Canada, 2.4 miles northwest of, northeast angle of intersection of Michigan and North Los Angeles avenues, in town of La Crescenta, north end of culvert, top of concrete head wall; chiseled square, marked "U. S. 1,561.8 B. M."	1,563.38
Reference bench mark; 33.45 feet southwest of p. b. m. "R. S. 5 1924," at McCormick's service station, on west end of concrete base of gasoline pumps; chiseled cross (Los Angeles County b. m.?) not marked	1,575.63
La Canada, 3.0 miles northwest of, southwest angle of intersection of Michigan and Pennsylvania avenues, in concrete post; bronze tablet stamped "R. S. 5 1924," marked "U. S. 1,574.4 P. B. M."	1,575.943
La Canada, 4.0 miles northwest of, 1.0 mile northwest of intersection of Michigan and Pennsylvania avenues, 0.25 mile west of Virginia Pl., south side of Michigan Ave., top of south head wall of concrete culvert; chiseled square, marked "U. S. 1,748.3 B. M."	1,750.11
Tujunga, 0.5 mile east of, at La Crescenta summit on Michigan Ave., 90 feet west of power pole 154547 E, center of concrete highway; chiseled square, marked "U. S. 1,853.8 B. M."	1,855.66
Tujunga, at east edge of, at intersection of Michigan Ave. and Monte Vista Bvd., center of concrete highway; chiseled square, marked "U. S. 1,838.1 B. M."	1,839.92
Reference bench mark; Tu Junga, at intersection of Michigan Ave. and Sunset Bvd., center of concrete highway; chiseled square, not marked	1,713.15
Tujunga, northwest intersection of Michigan Ave. and Sunset Bvd., 20 feet north of corner and inside curb, in concrete post; bronze tablet stamped "R. S. 6 1924," marked "U. S. 1,712.5 P. B. M."	1,714.206
Tujunga, 0.50 mile northwest of, northeast angle of intersection of Michigan Ave. and West El Centro St., top of center of east head wall of concrete culvert; chiseled square, marked "1,632.9"	1,634.52
Sunland post office, 1.0 mile southeast of, southeast angle of intersection of Michigan Ave. and Walnut Drive, 6 feet southeast of light pole 29797 E, top of 6-inch square concrete post; chiseled square centered with nail, marked "U. S. 1,514.5 B. M."	1,516.02
Sunland post office, 0.5 mile southeast of, 800 feet east of intersection of Michigan Ave. and First St., center of concrete highway bridge; chiseled square, marked "1,400.9"	1,402.34
Sunland post office, 0.1 mile south of, center of intersection of Michigan Ave. and Sherman St., center of concrete highway; chiseled square, marked "U. S. 1,348.3 B. M."	1,349.61
Sunland post office, 0.5 mile west of, center of intersection of Michigan Ave. and Sunland-Roscoe road, center of concrete highway; chiseled square, marked "1,330.1"	1,331.38
Reference bench mark; Sunland post office, 1.25 miles northwest of, 40 feet south of northeast corner of Michigan Ave., in curb, concrete bridge over Big Tujunga Canyon; chiseled square, not marked	1,199.32

	Feet
Sunland post office, 1.25 miles northwest of, 25.5 feet north of northwest corner of Michigan Ave., on concrete bridge over Big Tujunga Canyon, 3.5 feet west of guard rail, in concrete post; bronze tablet stamped "R. S. 7–1924," marked "U. S. 1,197.3 P. B. M."	1,198.411
Sunland post office, 2.05 miles northwest of, 0.8 mile west of Michigan Ave., on concrete bridge over Big Tujunga Canyon, at intersection of Tujunga Ave., and Wheatland Ave., top of center of south head wall of concrete culvert; chiseled square, marked "U. S. 1,151.5 B. M."	1,152.64
Sunland post office, 2.50 miles northwest of, 210 feet west of Tujunga District School, top of west end of north head wall of concrete culvert; chiseled square, marked "U. S. 1,130.8 B. M."	1,131.83
Sunland post office, 2.90 miles northwest of, 0.5 mile west of Tujunga District School, intersection of center lines of Tujunga Valley and Oreas avenues, center of concrete highway; chiseled square, marked "1,094.95"	1,095.97
Pacoima, 4.0 miles northeast of, northwest angle of intersection of Osborne Ave. and Eldridge St., at street marker, top of concrete post; chiseled square, marked "U. S. 1,110.1 B. M."	1,111.18
Reference bench mark, Pacoima, 3.0 miles northeast of, 140 feet north of intersection of Osborne Ave. and Mulholland St., on south edge of curve, in concrete highway; chiseled square, not marked	1,046.62
Pacoima, 3.0 miles northeast of, northeast angle of intersection of Osborne Ave. and Mulholland St., 12 feet north of city water meter, in concrete post; bronze tablet stamped "R. S. 8 1924" marked "U. S. 1,041.7 P. B. M."	1,042.693
Pacoima, 2.5 miles northeast of, northeast angle of intersection of Mulholland St. and Terrabella Ave., on south corner of right angle in concrete head wall of culvert; chiseled square centered with nail, marked "1,111.2"	1,112.23
Pacoima, 2.0 miles northeast of, southwest angle of intersection of Mulholland St. and North Sherman Way, top of center of south head wall of concrete culvert; chiseled square, marked "U. S. 1,155.6 B. M."	1,156.70
Pacoima, 1.5 miles northeast of, northeast angle of intersection of North Sherman Way and Borden St., 20 feet northeast of street marker, concrete irrigation pipe; south edge of top, power pole 80 feet northwest marked "1,073.8"	1,074.77
Pacoima, near east edge of, at northwest entrance of Pacoima Grammar School, center of top step; chiseled square, power pole 120 feet northwest marked "U. S. 1,042.3 B. M."	1,043.27
Reference bench mark; Pacoima, southwest angle of intersection of Sherman Way and Southern Pacific R. R., on concrete base of crossing signal, northwest corner; chiseled square	1,013.65
Pacoima, 80 feet south of Southern Pacific R. R. station, 35 feet west of track, in southwest angle of intersection of Sherman Way, 5 feet south of telegraph pole, in concrete post; bronze tablet stamped "R. S. 9 1924," pole marked "U. S. 1,012.4 P. B. M."	1,013.290
Pacoima, 0.75 mile northwest of, Southern Pacific R. R. semaphore 4627, top of concrete foundation; northwest corner, pole southeast marked "U. S. 1,039.4"	1,040.36

	Feet
San Fernando, Industrial Arts Building, in top step of north side of west entrance of building; bronze tablet stamped "1,076 1914 52"	1,076.355
San Fernando, on Porter Ave., at southeast corner of McClay & McClay Co.'s building, in wall; bronze tablet stamped "1,066 51" (Bull. 342, p. 72)	1,067.006
From San Fernando southwest along highways into Zelzah 6′ quadrangle	
San Fernando, 1.0 mile west of, northwest angle of intersection of Brand Bvd. and Webb St., on curb; chiseled square, marked "U. S. 1,016.8 B. M."	1,016.72
San Fernando, 1.75 miles west of, at southwest corner of San Fernando Mission grounds, northeast angle of intersection of cross streets, in curb; chiseled square, marked "U. S. 969.2 B. M."	969.08
San Fernando, 2.4 miles west of, southwest angle of intersection of Brand Bvd. and Chatsworth St., center of top of south head wall of concrete culvert; chiseled square, marked "U. S. 930.6 B. M."	930.37
Reference bench mark; San Fernando, 2.5 miles west of, northwest angle of intersection of Chatsworth St. and Haskell Ave., center of top of concrete head wall of culvert; chiseled square, not marked	931.65
San Fernando, 2.5 miles west of, southeast angle of intersection of Chatsworth St. and Haskell Ave., in concrete post; bronze tablet stamped "R. S. 14 1924," marked "U. S. 931.9 P. B. M."	931.603
San Fernando, 3.0 miles west of, center of intersection of Chatsworth St. and Woodley Ave.; ground surface elevation, marked "932.9"	932.68
San Fernando, 3.5 miles west of, northeast angle of intersection of Chatsworth St. and Havenhurst Ave., at street marker, in top of 6 by 6 inch post; nail, marked "U. S. 933.7 B. M."	933.395
San Fernando, 4.0 miles west of, northeast angle of intersection of Chatsworth St. and Balboa Ave., at street marker; top of 2-inch iron pipe centered with nail, marked "957.9"	957.63
From San Fernando along highways northwest to Sylmar, thence northeast and east along forest boundary and south to point 2 miles northeast of Pacoima	
San Fernando, 0.75 mile northwest of Southern Pacific Railway station, northeast angle of road crossing track, concrete foundation of semaphore 4613, southwest corner; chiseled square, marked "U. S. 1,103.8 B. M."	1,103.82
San Fernando, 1.25 miles northwest of, 275 feet west of semaphore 4610, center of road crossing on Southern Pacific R. R. track; top of north rail, marked "1,151.85"	1,151.92
San Fernando, 1.7 miles northwest of, northeast angle of intersection of private road crossing Southern Pacific R. R. track, semaphore 4601, in base of concrete foundation; nail embedded in concrete, marked "U. S. 1,177.7 B. M."	1,177.84
Reference bench mark; Sylmar station on Southern Pacific R. R., northwest angle of intersection of San Fernando Road and Roxford Ave., in curb; chiseled square, not marked	1,243.73
Sylmar station on Southern Pacific R. R., southwest angle of intersection of San Fernando Road and Roxford Ave., between curb and sidewalk, in concrete post; bronze tablet stamped "R. S. 10 1924," marked "U. S. 1,242.8 P. B. M."	1,242.950

	Feet
Sylmar, 0.75 mile northeast of, northwest angle of intersection of Rockford Ave. and Ramsen St., top of concrete box around city water meter; chiseled square, marked "U. S. 1,341.9 B. M."	1,342.13
Sylmar, 1.25 miles northeast of, at junction of Roxford Ave. and concrete road to Olive View Sanatorium, at southwest corner of concrete paving; chiseled square, marked "U. S. 1,418.6 B. M."	1,418.89
Sylmar, 1.6 miles northeast of, at power plant of Olive View Sanatorium, at east edge of main entrance to plant, on top of concrete post; painted square, marked "1,417.5"	1,417.78
Sylmar, 1.85 miles northeast of, 0.2 mile east of power plant of Olive View Sanatorium, on south side of road; iron post stamped "U. S. Forest Reserve boundary post No. 147 1905 S. F.," marked "1427.4"	1,427.768
Reference bench mark; San Fernando, 3.0 miles north of, 1.0 mile east of power plant of Olive View Sanatorium, southwest angle of crossroads; concrete monument, centered with brass cap and stamped "T. 3 N., R. 15 W. 22 and 23 S. F. R. O."	1,533.60
San Fernando, 3.0 miles north of, 1.0 mile east of power plant of Olive View Sanatorium, southwest angle of crossroads, at T. 3 N., R. 15 W., quarter corner between secs. 22 and 23; iron post stamped "U. S. Forest Reserve Boundary Post No. 146 S. F. 1905 R. S. 11 1924," marked "U. S. 1, 534.4 P. B. M."	1,534.816
San Fernando, 2.5 miles northeast of, northeast angle of intersection of Astoria Ave. and Eldridge St., at street marker; top of iron pipe filled with concrete, marked "1,465.7"	1,466.09
San Fernando, 3.0 miles northeast of, on east side of intersection of Hubbard Ave. and Eldridge St., 6 feet north of L. A. City water meter; top of 2-inch iron pipe extending about 2 feet above ground, marked "U. S. 1,383.2 B. M."	1,383.45
San Fernando, 2.0 miles northeast of, on west edge of Pacoima Canyon, 0.5 mile north of intersection of Mulholland St. and Brand Bvd., 70 feet south of right angle in road and 15 feet west of fence line, in field; 4-inch iron pipe filled with concrete and centered with nail, marked "U. S. 1,283.8 B. M."	1,283.94
San Fernando, 2.5 miles northeast of, 0.75 mile northeast of Mulholland St., concrete bridge over Pacoima Wash, on east side of Pacoima Canyon, 60 feet north of junction of Pacoima Canyon Road and private road east; iron post stamped "U. S. Forest Reserve Boundary Post No. 142 W. C. No. 10 1905 R. S. 12 1924," marked "U. S. 1,230.1 P. B. M."	1,230.151
Reference bench mark; San Fernando, 2.5 miles northeast of, 0.75 mile northeast of Mulholland St., on concrete bridge over Pacoima Wash, on east side of Pacoima Canyon, at intersection of Pacoima Canyon Road and private road east, in old concrete foundation; chiseled square	1,229.46
San Fernando, 2.75 miles northeast of, about 600 feet north of junction of Mulholland St. and Pacoima Canyon Road, 30 feet east of Pacoima Canyon Road; iron post stamped "U. S. Forest Boundary Post No. 140 W. C. No. 8 1905 S. F. R. S. 13 1924," marked "U. S. 1,152.1 P. B. M."	1,152.153

PIRU QUADRANGLE

[Latitude 34° 15′–34° 30′; longitude 118° 45′–119°]

VENTURA COUNTY

Precise leveling by U. S. Coast and Geodetic Survey in 1920

From Santa Paula quadrangle east along Southern Pacific R. R. through south part of Piru quadrangle into Santa Susana quadrangle

	Feet
X–30, Somis, 0.3 mile northeast of, in center pier of southwest water tank, 4 meters northwest of and 0.8 meter above track, railroad mileage 420.2; red metal disk	273.113
Y–30, Somis, 2.3 miles northeast of, west end of north abutment of concrete culvert 422–A, 4 meters north of and 1.5 meters below track, railroad mileage 422.4; red metal disk	372.634
Moorpark, 1.6 miles west of, in south end of west abutment of concrete culvert 425–B, 4 meters south of center line of track, 0.5 meter below track, railroad mileage 425.4; red metal disk B. M. E–31	469.714
F–31, Moorpark, 20 feet southwest of southwest corner of station, 30 feet north of center of track, railroad mileage 427.0; bronze cap on iron post stamped "511 L. A."	513.345
G–31, Moorpark, 2.6 miles east of, in pile of concrete poured on north side of highway, opposite block signal 429.8, 15 meters south of center line of track, 2 meters below track, railroad mileage 429.6; red metal disk	606.406
H–31, Moorpark, 4 miles east of, in south end of west abutment of stone culvert 431–A, 4 meters south of center line of track, 0.5 meter below track, railroad mileage 431; red metal disk	686.423
I–31, Santa Susana, 2.9 miles west of, in south end of west abutment of concrete culvert 434–A, 4 meters south of center line of track, 0.7 meter below track, railroad mileage 434.1; red metal disk	841.114

SAN FERNANDO QUADRANGLE

[Latitude 34° 15′–34° 30′; longitude 118° 15′–118° 30′]

LOS ANGELES COUNTY

Precise leveling by C. H. Semper in 1902 and L. F. Biggs in 1914

From Tujunga quadrangle west along Southern Pacific R. R. to Santa Susana quadrangle

	Feet
Semaphore 4313, top of concrete foundation; northeast corner	2,281.82
Semaphore 4324, top of concrete foundation; southwest corner	2,204.07
Semaphore 4336, top of concrete foundation; northwest corner	2,091.90
Russ, 1,700 feet west of west end of switch, 800 feet west of west end of tunnel, on northeast abutment of bridge 434–I, 6 feet from cliff; bronze tablet stamped "1986 1914 44"	1,987.080
Bridge No. 5, Santa Clara River, point on northeast corner of rock abutment; chiseled square, marked "U. S. B. M."	1,883.78
Semaphore 3368, top of concrete foundation; southwest corner	1,751.37
Lang semaphore, on southwest corner of cement foundation; chiseled cross, marked "U. S."	1,696.27
Lang, 200 feet west of station, at north edge of railroad right of way; iron post stamped "1690"	1,690.198

	Feet
Lang, 1.1 miles west of, signal box south side of track; top of	1,678.69
Semaphore 4407, top of concrete foundation; northeast corner	1,626.89
Semaphore 4422, top of concrete foundation; southwest corner	1,540.72
Semaphore 4433, top of concrete foundation; middle of north side	1,480.02
Culvert 444–A (wooden), point on southwest corner of	1,423.76
Semaphore 4453, top of concrete foundation; 8 inches east of east corner	1,397.53
Semaphore 4466, top of concrete foundation; southwest corner	1,305.75

From Santa Susana quadrangle southeast along Southern Pacific R. R. to Santa Monica quadrangle

Semaphore 4583, top of concrete foundation; southwest corner	1,273.42
Semaphore 4598, top of concrete foundation; southeast corner	1,206.22
Semaphore 4610, top of concrete foundation; southeast corner	1,106.32
San Fernando, on Porter Ave., McClay & McClay Co.'s building, on wall at southeast corner of (Johnson Ave. is now Porter Ave.); bronze tablet stamped "1066 51"	1,067.096
San Fernando Industrial Arts Building, north side of west entrance, in top step; bronze tablet stamped "1076 1914 52"	1,076.355
Semaphore 4627, top of concrete foundation; northwest corner	1,040.36
Pacoima, 80 feet west of railroad, at southwest corner of road intersection; iron post stamped "1013 53"	1,013.509
Milepost 19, concrete highway; top of	956.02

Primary leveling by H. S. Crowe in 1897–98

From Pacoima northwest along Southern Pacific R. R. to San Fernando, thence east up Tujunga Valley into Canyon

Pacoima, at corner of fence, 165 feet northwest of northwest corner of brick station building; 80 feet west of railroad; iron post stamped "1013" (beginning of precise line)	1,013.509
San Fernando, in southeast corner of brick wall of McClay & McClay Co.'s building on Johnson St.; bronze tablet stamped "1066," recovered by precise levels	1,067.096
T. 2 N., R. 14 W., sec. 10, 0.3 mile west of road fork, 40 feet south from corner of old orchard, 4 feet north of crooked tree and 20 feet from center of wagon road; iron post stamped "1187"	1,188.407
T. 2 N., R. 13 W., sec. 6, 0.75 mile east of S. A. Johnson's house, 10 feet south of wagon road on township line; iron post stamped "1470"	1,471.498

From Saugus east along Southern Pacific R. R. and highways to Ravenna (recovered by precise leveling)

T. 4 N., R. 15 W., 4.6 feet from common corner of secs. 13, 14, 23, and 24, road over tunnel, 15 feet from fence; iron post stamped "1565"	1,565.436
Lang's station, at north end of picket fence, 45 feet north of center of track, between hotel building and section house; iron post stamped "1690" (recovered by precise levels)	1,690.434
Steel bridge No. 11; on concrete pier bulkhead of, in Soledad Canyon, 11 miles south of Acton; copper bolt stamped "1822"	1,822.731
Steel bridge No. 5, on concrete pier bulkhead of, at northwest corner; copper bolt stamped "1913"	1,914.050

Spur north up Agua Dulce Canyon

	Feet
T. 5 N., R. 14 W., sec. 34, 1.25 miles west of J. M. Talbot's house, 2 feet south of southeast corner of adobe house; iron post stamped "2258"	2,258.840

Spur north up Mint Canyon

T. 4 N., R. 15 W., sec. 15, 2 miles north of railroad, on side of hill, about 30 feet north of spring, in flat rock 12 by 12 by 8 inches; copper bolt stamped "1556"	1,556.311
T. 4 N., R. 15 W., sec. 2, northwest corner of W. H. Thomas's cabin, 4.75 miles from mouth of canyon; iron post stamped "1778"	1,778.521

SANTA MONICA QUADRANGLE

[Latitude 34°–34° 15′; longitude 118° 15′–118° 30′]

LOS ANGELES COUNTY

Precise leveling by U. S. Coast and Geodetic Survey in 1920

From Calabasas quadrangle southeast along Southern Pacific R. R. through north part of Santa Monica quadrangle into Pasadena quadrangle

	Feet
X–31, Zelzah, 3.3 miles southeast of, in northeast end of northwest abutment of concrete culvert 453–A, 0.4 meter northeast of center line of track, 0.5 meter below track, railroad mileage 453.2; nail sunk in horizontal surface of concrete	792.544
Z–31, Zelzah, 4 miles southeast of, in southwest end of northwest abutment of concrete culvert 453–D, 0.4 meter southwest of center line of track, 0.5 meter below, railroad mileage 453.9; spike sunk in horizontal surface of concrete	789.129
A–32, Burbank, 8 miles northwest of, crossing of Pacific Electric and Southern Pacific railroads, 20 meters northeast of Raymer tower, in southwest end of northwest abutment of highway concrete culvert, 20 meters west of center line of Pacific Electric Ry. track. 15 meters northeast of center line of Southern Pacific R. R. track, railroad mileage 455; red metal disk	777.003
B–32, Burbank, 4.9 miles northwest of, in northeast end of southeast abutment of concrete culvert 458–B, 4 meters northeast of center line of track, 0.6 meter below, railroad mileage 458.1; nail sunk in horizontal surface of concrete	746.793

Primary leveling by H. S. Crowe in 1897 and 1900

From Clement Junction, Los Angeles, west along Southern Pacific R. R. to Santa Monica (adjusted double-rodded line)

University station, 65 feet south of southwest corner of station, 1 foot west of telegraph pole; iron post stamped "174"	174.786
Cienega siding, at northwest corner of fence for cattle corral and 50 feet west of center of track; iron post stamped "118"	118.734
Ivy station, in southwest corner of fence of cattle guard at road crossing, 150 feet northwest of station building; iron post stamped "103" (destroyed)	103.250

	Feet
Palms, in front brick wall at northwest corner of warehouse, fifth course of bricks above water table and in center of second course of bricks from north end; bronze tablet stamped "126"	126.614
Home Junction, 80 feet east from center of railroad building, 48 feet east from center of track, near fence; iron post stamped "165"	164.964
Santa Monica, on northeast corner of Oregon and Third streets, in brick wall of building used as bank; bronze tablet stamped "79" (not found in 1923)	79.400
Santa Monica, in concrete floor of railroad turntable foundation, 3.2 feet north of center of turntable, 6 inches west of center of track at end of Long Wharf; copper bolt stamped "17" (not found in 1923)	17.510
Santa Monica, top surface of railroad turntable at inner end of wharf (the turntable has a well-laid concrete foundation); U. S. C. & G. S. bench mark No. 1 (elevation by U. S. C. & G. S.) (not found in 1923)	17.42
From Glendale northwest along Southern Pacific R. R. to Pacoima (double-rodded line)	
Glendale, 1.5 feet from northwest corner of fence around garden, 200 feet north of station building; iron post stamped "432" (U. S. C. & G. S., 1920)	432.158
Burbank, on west side of railroad track, 51 feet from center, 117 feet northwest from northwest corner of station; iron post stamped "563" (not found in 1923)	563.218
Dundee, 4.2 feet from eucalyptus tree, 600 feet west of railroad station; iron post (cap removed, edge elevation)	760.05
From Burbank west along Chatsworth Park branch railroad to Encino	
MacNeil siding; top of rail	597.2
Garnsey siding; top of rail	663.6
Garnsey siding, 300 feet west of, 3.5 feet east of telegraph pole 479, 50 feet south of railroad track; iron post stamped "665 L. A."	665.685
Trestle 483–C, opposite, 50 feet south of center of track, 4 feet east of telegraph pole 484; iron post stamped "704 L. A."	705.163
Precise leveling by L. F. Biggs in 1914, fitted to U. S. C. & G. S. precise level line over same route below Burbank	
From point 1 mile south of Pacoima southeast along Southern Pacific R. R. to Los Angeles	
Semaphore 4657, top of concrete foundation; northwest corner, marked "19"	913.80
Concrete highway milepost 17; top of	875.83
Semaphore 4675, top of concrete foundation; northwest corner	828.68
Roscoe, 1,800 feet northwest of, 50 feet south of highway milepost 16, 50 feet west of railroad, on northeast corner of highway concrete culvert; bronze tablet stamped "826 1914 No. 55"	826.251
Semaphore 4687, top of concrete foundation; northwest corner	768.90
Dundee store, 0.9 mile northwest of, 600 feet west of railroad, near eucalyptus tree; iron post stamped (cap has been removed and building removed)	760.243

	Feet
Concrete highway milepost 14; top of	711.14
Concrete highway milepost 13; top of	642.14
Semaphore 4718, top of concrete foundation; southeast corner	573.77
Burbank Union High School, on top of fifth step at base of north column at west entrance to building; bronze tablet stamped "623 1914 No. 56"	622.834
Semaphore 4729, top of concrete foundation; northwest corner	524.04
West Glendale Winery, 0.5 mile northwest of, in west end of small concrete highway culvert; lead plug with copper nail, marked "U. S. B. M."	465.50
West Glendale Winery, at southwest corner of building; on north side of door sill; chiseled cross	469.40
Semaphore 4760, top of concrete foundation; southeast corner	453.02
Tropico (Glendale), 1.5 feet from northwest corner of fence around garden, 200 feet north of station building; iron post set flush with ground stamped "Elev. 432 No. 57" (recovered by C. & G. S. in 1920 as J 32)	432.158
Culvert 478–A, on northwest corner of concrete abutment; chiseled cross, marked "U. S."	374.40

SANTA SUSANA QUADRANGLE

[Latitude 34° 15′–34° 30′; longitude 118° 30′–118° 45′]

LOS ANGELES AND VENTURA COUNTIES

Precise leveling by U. S. Coast and Geodetic Survey in 1920

From Piru quadrangle east along Southern Pacific R. R. through south part of Santa Susana quadrangle to point near Chatsworth, Calabasas quadrangle, thence south to Chatsworth

	Feet
J–31, Santa Susana, 1.4 miles west of, in east end of west abutment of stone culvert 435–H, 4 meters north of center line of track, 1 meter below track, railroad mileage 435.6; red metal disk	916.081
K–31, Santa Susana, 2 miles west of station, in northeast abutment of water tank, 5 meters south of center line of track, level with track, railroad mileage 437.2; red metal disk	961.389
L–31, Santa Susana, 30 feet northeast from northeast corner of bunk house, 165 feet northeast of section house, at corner of fence; iron post stamped "961 L. A."; bronze cap on post	962.265
M–31, Santa Susana, 0.9 mile east of, in south end of west abutment of stone culvert 438-C, 4 meters south of center line of track, 0.5 meter below, railroad mileage 438.4; red metal disk	992.301
N–31, Santa Susana, 2.4 miles east of, 70 meters west of block signal 4400, 15 meters southeast of stone culvert 439–J, 15 meters south of center line of track, 1 meter below, railroad mileage 439.9, in high southeast point of protruding sandstone boulder; red metal disk	1,068.462
O–31, tunnel 27, west end of, north end of concrete box culvert 442–B, 3 meters north of center line of track, 2 meters below track, railroad mileage 442.9; surface within an outlined square on masonry	1,085.510
P–31, tunnel 28, west end of, south end of concrete box culvert 443–D, 3 meters south of center line of track, 0.4 meter below, railroad mileage 443.9: surface within an outlined square on masonry	1,030.266

Precise leveling along the Los Angeles Aqueduct by the Aqueduct Commission in 1907, adjusted by the U. S. Geological Survey in 1922

	Feet
Reaburn's L line, 100 feet west of, station 141–00 and 100 feet north of ⊡ 81, in Dry Canyon, 100 feet west of road where it enters Government property; standard L. A. A. pipe 115, marked with red and blue flag	1,517.685
Reaburn's L line, on knoll 140 feet west of station 184–00 and 300 feet east of two old houses in bottom of Dry Canyon near dam site; standard L. A. A. pipe No. 116, marked with red and blue flag	1,539.910
Reaburn's L line, on point of ridge 60 feet east of, station 201–00 and 70 feet northwest of ⊡ 246; standard L. A. A. pipe No. 117, marked with red and blue flag	1,520.726
Reaburn's L line, 200 feet east of, station 221–50 and 150 feet west of ⊡ 258 on north side of canyon, on east side of Dry Canyon; standard L. A. A. pipe No. 118, marked with red and blue flag	1,517.975
Reaburn's L line, 105 feet west of, station 258–90 and 100 feet east of ⊡ 298, near head of canyon on east side of Dry Canyon; standard L. A. A. pipe No. 119, marked with red and blue flag	1,518.451
Reaburn's L line, 90 feet east of, station 282–25 and 50 feet south east of ⊡ 418, at head of canyon on west side of Haskell Canyon; standard L. A. A. pipe No. 120, marked with red and blue flag	1,518.406
Reaburn's L line, on knoll on long ridge 60 feet east of, station 312–50 and 70 feet east of 423, near north end of Deadman Canyon siphon; standard L. A. A. pipe No. 121, marked with red and blue flag	1,535.551
U. S. Forest Reserve boundary post 159 (S. B. Res.), on south side of Deadman Canyon, at edge of road where it enters gate, standard L. A. A. pipe No. 122, marked with red and blue flag	1,262.034
Reaburn's L line, on ridge 15 feet west of, station 365 and 250 feet north of ⊡ 441, near south end of Deadman siphon; standard L. A. A. pipe No. 123, marked with red and blue flag	1,509.504
Reaburn's L line, on ridge 60 feet west of, station 386–75 and 8 feet south of ⊡ 446, near north end of Soledad Canyon siphon; standard L. A. A. pipe No. 124, marked with red and blue flag	1,507.694
U. S. Forest Reserve boundary post 157 (S. B. Res.), on south side of bottom of Soledad Canyon, near railroad crossing; standard L. A. A. pipe No. 125, marked with white flag	1,269.550
Reaburn's L line, on ridge 400 feet east of, station 468 and 50 feet east of 472, near south end of Soledad Canyon siphon; standard L. A. A. pipe No. 126, marked with red and blue flag	1,495.448
Reaburn's L line, on point of ridge 60 feet east of, station 504 and 2 feet east of ⊡ 493; standard L. A. A. pipe No. 127, marked with red and blue flag	1,513.644
Reaburn's L line, on ridge 1,500 feet east of, station 537 and 75 feet southwest of ⊡ 509; standard L. A. A. pipe No. 128, marked with red and blue flag	1,484.805
Reaburn's L line, 500 feet west of, station 572 and 150 feet west of ⊡ 517 near north end of Placerita Canyon; standard L. A. A. pipe near north end of Placerita Canyon; standard L. A. A. pipe No. No. 129, marked with red and blue flag	1,480.671
Reaburn's L line, near station 605, at ⊡ 528; standard L. A. A. pipe No. 130, in bottom of canyon, marked with red and blue flag	1,487.484

	Feet
Reaburn's L line, on crest of sharp ridge 600 feet east of, station 631 near north end of Whitney Canyon siphon; standard L. A. A. pipe, No. 131, marked with red and blue flag	1,478.419
Reaburn's L line, 60 feet east of, station 665, and 60 feet north of 560, on west side of canyon, 100 feet south of house near north portal of Newhall tunnel; standard L. A. A. pipe No. 132, marked with red and blue flag	1,494.287
U. S. Forest Reserve Boundary post No. 151 (S. B. Res.), near south portal of Newhall tunnel; No. 133, marked with red and blue flag	1,497.748
Reaburn's L line, 220 feet west of, station 738–50 and 20 feet north ⊡ 568 on north side of canyon; standard L. A. A. pipe No. 134, marked with red and blue flag	1,493.847
Fernando Reservoir No. 1, on knoll south of east end of dam site; standard L. A. A. pipe No. 135, marked with red and blue flag	1,227.186
Fernando Reservoir No. 2, on hill at east end of dam site; standard L. A. A. pipe No. 136, marked with red and blue flag	1,182.440

Precise leveling by C. H. Semper in 1902 and L. F. Biggs in 1914

From San Fernando quadrangle west along Southern Pacific R. R. to Saugus, thence southeast to San Fernando quadrangle

Saugus, 2.8 miles east of; at undertrack crossing of Los Angeles aqueduct, in northwest corner of concrete abutment; bronze tablet stamped "1239 1914 46"	1,238.910
Semaphore 4487; top of concrete foundation	1,217.33
Semaphore 4496; top of concrete foundation; southwest corner	1,186.86
Saugus (Surrey post office), 18 inches from north corner of pump house, 18 feet from center of track, 33 feet from south corner of station; iron post stamped "1171 47"	1,170.834
NOTE.—This bench mark probably has been disturbed; its value by two previous lines from Newhall is 0.30 foot greater.	
Semaphore 4517; top of concrete foundation; base of ladder	1,207.60
Newhall, 27 feet south of station, 30 feet west of track; iron post stamped "1273 48"	1,272.689
Semaphore 4542; top of concrete foundation; southeast corner	1,420.07
San Fernando tunnel, north end of, center of track; top of iron pin	1,484.51
San Fernando tunnel, south end of, center of track; top of iron pin	1,436.10
San Fernando tunnel, 2 miles south of, at end of yard at a house, west side of track; iron post stamped "1417 49"	1,416.823
San Fernando tunnel, 0.25 mile south of, in base of northeast concrete pier of wagon bridge over railroad, east side of track; bronze tablet stamped "1416 1914 50"	1,416.583
San Fernando tunnel, 1.5 miles south of, on north end of concrete culvert of undertrack crossing of Los Angeles aqueduct; chiseled point on cross and letters "U. S. B. M."	1,281.86

Primary leveling by H. S. Crowe in 1898 and 1900

From San Fernando north along Southern Pacific R. R. to Saugus (recovered by precise levels)

San Fernando tunnel, 0.25 mile south of south end of, at end of yard at section house, at south end of white fence; iron post stamped "1417"	1,416.583

Feet

San Fernando Pass, road over tunnel, 50 feet south of north end of cut, east side of wall, 4 feet above road; bronze tablet stamped "1799" ---------- 1,799.737

Newhall, between tree and telegraph pole, 27 feet south of station, 30 feet from center of track; iron post stamped "1273" ---------- 1,272.689

Saugus, 18 inches from north corner of pump house, 18 feet from center of track, 33 feet from south corner of station building; iron post stamped "1171" ---------- 1,170.834

From San Fernando west along wagon road to Chatsworth Park

Chatsworth Park and Fernando, midway between, 5 feet south of fence corner, 37 feet south of center of road running east and west, and 45 feet east of road running north and south; iron post stamped "1031 L. A." (reset in 1924) ---------- 1,032.051

Chatsworth Park, at corner of Simi road and Devonshire Ave., 1 foot north from southeast corner of Santa Susana schoolhouse, 11.5 inches below base of building; bronze tablet stamped "962 L. A." ---------- 963.754

From Chatsworth Park west along road over Santa Susana Pass to Simi

Santa Susana Pass, at summit and 50 feet north of road, 33 feet southwest of signpost, in large sandstone boulder 4.5 feet above ground; bronze tablet stamped "1604 L. A." ---------- 1,605.321

Santa Susana, 30 feet southeast from southeast corner of bunk house, 165 feet southeast of section house, at corner of fence; iron post stamped "961 L. A." (Recovered by C. & G. S. 1920) ---------- 962.265

From Saugus west along Southern Pacific R. R. to Camulos

San Francisco ranch, 81 feet east from northeast corner of house of superintendent, in northeast corner of yard, 2 feet from junction of fence lines, 15 feet west of center of road; iron post stamped "1054 L. A." ---------- 1,054.401

Los Angeles and Ventura counties, 3.5 feet south of iron signpost of, 6 feet south of fence line, 50 feet north of center of track, 12 feet south of county road; iron post stamped "858 L. A." ---------- 858.573

From Saugus north along road to St. Francis ranch

T. 5 N., R. 16 W., sec. 34, south side of, in northwest corner of Edw. D. Kichline's field, at foot of grade over mountain, 1 foot east of corner of fence; iron post stamped "1235 L. A." ---------- 1,238.368

TEJON QUADRANGLE

[Latitude 34° 30′–35°; longitude 118° 30′–119°]

LOS ANGELES, KERN, AND VENTURA COUNTIES

Primary leveling by H. S. Crowe in 1900 and 1901

At sec. 11, T. 5 N., R. 16 W.

Feet

T. 5 N., R. 16 W., sec. 11, 1 mile south of St. Francis ranch, 40 feet west of road, on small flat, 5 feet east of cottonwood tree; iron post stamped "1600 L. A." (C. & G. S.) ---------- 1,600.865

From Castac northwest along wagon road and trail via Castac, Piru, and Grapevine creeks to Rose station

	Feet
Carmichael's ranch, 1.5 feet west of northwest corner of fence, on north side of lane; iron post stamped "1172 L. A."	1,172.338
Victor Cordova's residence, west side of, at west corner of fence around garden, 500 feet north of wagon road, on mesa above creek; iron post stamped "1457 L. A."	1,457.650
House of Frank S. Randolph, 0.3 mile from, 12 feet east of trail to Oak Flats, at summit of ridge from Castac Creek; iron post stamped "2807 L. A."	2,807.940
Spring Creek, 1,500 feet north of where it empties into Piru Creek, 45 feet north of trail where it turns north up Piru Canyon, on flat side of rock 6 by 2 by 4 feet; bronze tablet stamped "2060 L. A."	2,060.376
Bainbridge's house, 250 feet northeast of, sec. 34, T. 7 N., R. 18 W., at north corner of fence around hog corral, at south end of and 30 feet east of center of wagon road to house; iron post stamped "2307 L. A."	2,307.466
Alamo ranch, in jog of fence around house of M. C. Bailey; iron post stamped "2796 L. A."	2,796.570
German ranch, Charles Schliesmayer's ranch, 1.5 feet west of corner, at intersection of fence lines, 45 feet south of road; iron post stamped "3463 L. A."	3,464.118
Tejon Pass, at summit, 6 feet south of brush fence and 40 feet north of wagon road; iron post stamped "4230 L. A.."	4,231.433
Los Angeles and Kern counties; 6-penny wire nail in notch on post marking line	3,751.78
Los Angeles and Kern counties, 2.5 feet north of line post; iron post stamped "3744 L. A."	3,745.704
Fort Tejon, in front of gatepost at entrance to residence of superintendent of Castac ranch, 45 feet west of wagon road; iron post stamped "3174 L. A."	3,175.080
Rose station, 0.5 mile south of top of grade from, 20 feet east of road at top of hill where road runs across low place to the south; iron post stamped "2132 L. A."	2,133.188
T. 10 N., R. 19 W., near northwest corner sec. 4, 12 feet south of gate across road, 10 feet east of center of road, 2 feet south of post 6 by 8 inches; iron post stamped "1085 L. A."	1,087.419

From Lubec west to Soldiers' Home Camp

Soldiers' Home Camp, opposite deserted ranch house, 4 feet west of fence line, 6 feet south of wagon road; iron post stamped "4471"	4,473.421

From German east along road, via Quail and Neenach, to Manzana

McKenzie's house, 160 feet northeast of northeast corner of, at northeast corner of intersection of fences, 50 feet south of road; iron post stamped "3393 L. A."	3,393.490
La Liebre ranch, at corner of fence where road turns to east, 0.5 mile west of brick house on county road; iron post stamped "3091 L. A."	3,091.136
Henry Hatch's ranch (Vala Vista), at residence, 2 feet east of gate, in front of picket fence; iron post stamped "3039 L. A." (C. & G. S.)	3,038.486

	Feet
Manzana, opposite driveway from main road to post office and store of A. E. Silvey, on east side of road, 1 foot south of fence post; iron post stamped "2870 L. A."	2,868.959

Primary leveling by K. W. Trimble and G. L. Hagman in 1910

From point near southwest corner of sec. 4, T. 10 N., R. 19 W., south along highway to point 3.1 miles south of Rose station

NOTE.—No adjustment has been made of this line, owing to an excessive closure error of 1.159 feet upon Bull. 342 value.

T. 10 N., R. 19 W., near northwest corner of sec. 4, 20 feet west of center of road, just south of point where cut-off road to Bakersfield turns west near telephone pole 1368; iron post stamped "1085 L. A."	1,087.119
Rose, 0.7 mile north of, west side of road where telephone line turns east, in base of telephone pole 1408, painted "U. S. B. M. 1199"; spike	1,199.29
Rose, 0.7 mile south of, power tower 300, on west lower brace, marked "U. S. □ B. M."; chisel mark	1,367.36
Rose, 1.5 miles south of, power tower 308, on south lower brace, marked "U. S. □ B. M."; chisel mark	1,535.23
Rose, 3.1 miles south of (see Bull. 342, p. 79)	2,132.888

Precise leveling along the Los Angeles Aqueduct by the Aqueduct Commission, in 1907, adjusted by the U. S. Geological Survey in 1922

Keller's L line, 410 feet north of, station 1873–50, north side of Antelope Valley; standard L. A. A. pipe No. 101, marked with red and blue flag	3,110.942
Keller's L line, 175 feet north of, station 1975–50, north side of Antelope Valley; standard L. A. A. pipe No. 102, marked with red and blue flag	3,099.178
Keller's L line, 800 feet north of, station 2050–59, at north end of siphon near Neenach across Antelope Valley; standard L. A. A. pipe No. 103, marked with red and blue flag	3,112.629
Keller's L line, 300 feet north of, station 2267–00, near south end of Antelope Valley siphon at Neenach; standard L. A. A. pipe No. 104, marked with red and blue flag	3,052.084
Keller's L line, 90 feet north of, station 2397–00, south side of Antelope Valley; standard L. A. A. pipe No. 105, marked with red and blue flag	3,053.688
Keller's L line, 190 feet north of, station 2573–00, south side of Antelope Valley; standard L. A. A. pipe No. 106, marked with red and blue flag	3,044.215
Reaburn's L line, 150 feet northwest of, station 0–00, on bench under sycamore trees, on west side of San Francisquito Canyon, near diversion point; standard L. A. A. pipe No. 111, marked with red and blue flag	1,523.369
Reaburn's L line, 300 feet west of, station 46–000 at ⊡ 145, on point of ridge on north side of first canyon south of old winery, on east side of San Francisquito Canyon; standard L. A. A. pipe No. 112, marked with red and blue flag	1,526.067

	Feet
Reaburn's L line, 400 feet west of, station 75–00, on north side of open canyon just south of high cut bank on east side of San Francisquito Canyon, on point of ridge; standard L. A. A. pipe No. 113, marked with red and blue flag	1,503.444
Reaburn's L line, 150 feet west of, station 100–00, 100 feet south of 198, on north side small canyon, east side of San Francisquito Canyon, opposite old adobe house; standard L. A. A. pipe No. 114, marked with red and blue flag	1,527.606

TUJUNGA QUADRANGLE

[Latitude 34° 15′–34° 30′; longitude 118°–118° 15′]

LOS ANGELES COUNTY

Primary leveling by H. S. Crowe in 1897

Up Tujunga Canyon east along road to Hoyt ranch, thence northeast along trail up canyon and over ridge to North Fork Tujunga Creek at mouth of Mill Creek, thence northeast 2 miles up Mill Creek to end of wagon road

	Feet
Hoyt ranch, 0.7 mile northwest of, about 800 feet from creek crossing, on brushy flat, 6.5 miles northeast of Montevista, in face of rock 14 by 5 by 3 feet, 2.7 feet above surface of ground; bronze tablet stamped "1888"	1,889.645
Hoyt's ranch, 2.75 miles northeast of, in rock at foot of slope, pine tree growing in rock; copper bolt stamped "2115"	2,116.315
Boulder 7 by 5 by 3 feet, on trail where it is in sight of Big Tujunga, about 1,500 feet up ridge; copper bolt stamped "2593"	2,594.905
Small summit, 1.1 miles on trail, in flat granite slab; copper bolt stamped "3526"	3,527.291
Summit of ridge, 50 feet east of, in granite boulder 2 by 1 feet; copper bolt stamped "4398"	4,399.579
Junction of North Fork and Mill creeks, 0.5 mile northwest of, in granite boulder 12 feet north of trail; copper bolt stamped "3935"	3,936.200
Junction of Mill Creek and North Fork of Big Tujunga, near trail from latter, in granite boulder; copper bolt stamped "3056"	3,057.473
Mill Creek, 2 miles above mouth, 20 feet from north end of wagon road, in rock on south bank of Mill Creek at point where trail goes over ridge to Big Tujunga Creek; copper bolt stamped "3463"	3,464.749

From mouth of Mill Creek southwest to mouth of North Fork of Tujunga Creek (single spur)

Vertical Falls, on North Fork, 35 feet in height, in ledge of rock on north side of creek, about 6 feet above water and 20 feet north of falls; bronze tablet stamped "2879"	2,880.728
Falls where North Fork empties into Big Tujunga Creek, 40 feet south of, in granite boulder 6 by 5 by 4 feet on north side of North Fork; copper bolt stamped "2671"	2,671.977

From end of wagon road on Mill Creek southeast across ridge along trail to Tujunga Creek, thence up creek trail to southeast corner sec. 5, T. 2 N., R. 11 W. (single spur)

Wickiup Canyon, 0.3 mile east of, on south side of Big Tujunga Creek, in boulder 4 by 6 by 2 feet in bed of stream, 25 feet south of trail and 60 feet east of canyon, where trail goes down from ridge from Mill Creek, near dead willow tree in stream, in oak stake driven in bank marked "B M."; copper bolt stamped "32"	3,267.066
Alder Creek, in bed of, at junction with Big Tujunga, in hole drilled in boulder 8 by 8 by 12 feet; copper bolt stamped "3415"	3,416.462

Feet

T. 2 N., R. 11 W., sec. 5, near southeast corner of, 40 feet east of trail between Barley Flats and Mount Wilson, in face of granite ledge facing Tujunga River 60 feet east of pine tree 18 inches in diameter; bronze tablet stamped "4046" 4,047.138

Up Mill Creek northeast over divide and northwest down Aliso Canyon to Acton

Divide between Mill Creek and Aliso Canyon, 10 feet east of road; iron post stamped "5030" 5,031.964

Smith's stamp mill, 250 feet east of, in boulder 6 by 6 by 4 feet, at junction of roads going up Dump and Tie canyons; copper bolt stamped "4452" 4,453.098

Big Tujunga mines and Jones's ranch, intersection of roads to, 6 miles east of Acton, 18 feet south of signboard; iron post stamped "3348" 3,349.157

Acton, 3 miles south of, 30 feet from northeast corner of stone house on big ridge; copper bolt stamped "3021" 3,022.701

Aliso Canyon, mouth of, 2 miles east of Acton, 1 foot west of signboard; iron post stamped "2829" (reset) 2,834.124

Acton, southeast corner of hotel, in brick wall; bronze tablet stamped "2700" (recovered by precise leveling) 2,701.503

From Acton southeast along Southern Pacific R. R to Ravenna

Ravenna station, 58 feet east of door of office, on east side of track, 3.5 feet from gum tree; iron post stamped "2468" (recovered by U. S. C. & G. S.) 2,468.996

From Aliso Canyon northeast along Southern Pacific R. R. to Vincent

Vincent, 500 feet north of station, in corner of jog in fence, 500 feet west of center line of sec. 22, T. 5 N., R. 12 W.; iron post stamped "3219" (recovered by U. S. C. & G. S.) 3,219.884

LOS ANGELES COUNTY SPECIAL SURVEY

PASADENA, SAN FERNANDO, SANTA MONICA, AND TUJUNGA QUADRANGLES

[Latitude 34°–34° 30′; longitude 118°–118° 30′]

Precise leveling by the U. S. Coast and Geodetic Survey in 1920

From Zelzah 6′ quadrangle southeast along Southern Pacific R. R. to Burbank

Feet

X–31, Zelzah, 3.3 miles southeast of, in northeast end of northwest abutment of concrete culvert 453–A, 0.4 meter northeast of center line of track, 0.5 meter below railroad mileage 453.2; nail sunk in horizontal surface of concrete 792.544

Z–31, Zelzah, 4 miles southeast of, in southwest end of northwest abutment of concrete culvert 453–D, 0.4 meter southwest of center line of track, 0.5 meter below railroad mileage 453.9; spike sunk in horizontal surface of concrete 789.129

A–32, Burbank, 8 miles northwest of, at crossing of Pacific Electric Ry. and Southern Pacific R. R. lines, 20 meters west of center line of Pacific Electric track, 15 meters northeast of center line of Southern Pacific track, 20 meters northeast of Raymer tower, at railroad mileage 455, in southwest end of northwest abutment of highway concrete culvert; red metal disk 777.003

B–32, Burbank, 4.9 miles northwest of, in northeast end of southeast abutment of concrete culvert 458–B, 4 meters northeast of center line of track, 0.6 meter below, at railroad mileage 458.1; nail sunk in horizontal surface of concrete 746.793

Feet

C–32, Burbank, 4.2 miles northwest of, in southwest end of southeast abutment of concrete culvert 458–D, 4 meters southwest of center line of track, 0.5 meter below, at railroad mileage 458.8; nail sunk in horizontal surface of concrete 735.855

D–32, Burbank, 2.9 miles northwest of, in southwest end of southeast abutment of concrete culvert 460–A, 4 meters southwest of center line of track, 0.5 meter below, at railroad mileage 460.1; nail sunk in horizontal surface of concrete 709.369

E–32, Burbank, 1.9 miles northwest of, 4 meters northeast of center line of track, 0.5 meter below, at railroad mileage 461.1, in northeast end of northwest abutment of concrete culvert 461–A; nail sunk in horizontal surface of concrete 662.200

F–32, Burbank, 1.1 miles northwest of, in southwest end of southeast abutment of concrete culvert 461–G, 4 meters southwest of center line of track, 0.5 meter below, at railroad mileage 461.9; bolt sunk in horizontal surface of concrete 618.276

H–32, Burbank, at main entrance of City Hall, in sidewalk, at foot of east footing, just north of northeast end of first step; red metal disk 622.266

Precise leveling by U. S. Coast and Geodetic Survey in 1920 over precise leveling by L. F. Biggs in 1914

From Burbank south along Southern Pacific R. R. to Florence quadrangle in degree quadrangle 33°–34°, 118°–119°

I–32, Burbank, 2.1 miles southeast of, in south corner of curbing to pump house city of Glendale, 2 [200 ?] meters southeast of milepost 474 (San Joaquin Valley Route mileage used), 18 meters northeast of center line of track, level with track; red metal disk (wall found cracked in 1923 and elevation redetermined) 470.278

J–32, Glendale (Old Tropico), 1.5 feet from northwest corner of fence around garden, 200 feet north of station building; iron post set flush with ground, stamped "Elev. 432. No. 57" 432.158

P–32, Glendale, 1.3 miles south of, 4 meters east of center line of track (west bound), 0.5 meter below, at railroad mileage 478.4, in south end of east abutment of concrete culvert 478–A; red metal disk 374.389

T–32, Los Angeles, north of, on south abutment of first Southern Pacific R. R. crossing of Los Angeles River, on northern end of Southern Pacific yard, about 0.5 mile north of steel Santa Fe bridge, east of track; a rounded knob in top of stone abutment; square on masonry 329.009

U–32, Los Angeles, about 2.7 miles north of, in top of curved surface on south end of concrete wing of west abutment of Atchison, Topeka & Santa Fe Ry. bridge 140–A over Los Angeles River; lead plug with copper nail 317.102

Los Angeles, about 2.7 miles north of, Atchison, Topeka & Santa Fe Ry. bridge 140–A over Los Angeles River, near north end of first pier from west end; lead plug with copper nail, marked "U. S. B. M." 309.949

NOTE.—This is the bench mark formerly given erroneously as U–32 and recovered by Senseney in 1923 with the value given as determined by two lines from V–32.

	Feet
S–32, Los Angeles, county courthouse, at southeast corner of Broadway and Temple streets, in granite buttress on right side of main steps to building; Geological Survey bronze tablet stamped "338" (U. S. G. S. Bull. 342, p. 70)	338.592
R–32, Los Angeles, city hall building on Broadway, about 3 feet above north steps to front entrance; Geological Survey tablet stamped "286" (U. S. G. S. Bull. 342, p. 70)	286.699
X–32, Clement Junction near Los Angeles, on west side of Alameda St., 95 feet south of south curb of East Twenty-first St., at west edge of sidewalk; Geological Survey iron post stamped "220" (U. S. G. S. Bull. 342, p. 70)	220.570

Additional bench marks on preceding route by L. F. Biggs

Burbank Union High School, on top of fifth step at west entrance to building, at base of north column; bronze tablet stamped "623 1914 No. 56"	622.834
Semaphore 4729, northwest corner of; top of concrete foundation	524.04
West Glendale Winery, 0.5 mile northwest of, in west end of small concrete highway culvert; lead plug with copper nail marked "U. S. B. M."	465.50
West Glendale Winery, at southwest corner of building, on north side of door sill; chiseled cross	469.44
Semaphore 4760, top of concrete foundation; southeast corner	457.04
Culvert 479–A, on northwest corner of concrete abutment; chiseled cross marked "U. S."	374.40
Los Angeles, at intersection of San Fernando road and Granada St., on north end of west curb; chiseled cross marked "U. S. B. M."	342.96
Los Angeles, Southern Pacific Bridge No. 1 over Los Angeles River, 6 inches from northeast corner of north abutment; lead plug with copper nail (R. R. bench mark) marked "U. S. B. M."	329.03
Los Angeles, Atchison, Topeka & Santa Re Ry. bridge 140–A over Los Angeles River, near north end of first pier from west end; lead plug with copper nail marked "U. S. B. M."	311.61
Los Angeles, Alameda and Alizo streets, intersection point	272.8
Los Angeles, Arcade station, 3 inches north of center post of northwest tower; copper plug set in asphaltum (old p. b. m.) marked "256"	256.293
Los Angeles, Alameda and Fifteenth streets	229.2

Precise leveling by L. F. Biggs in 1914 over previous precise line by C. H. Semper

From Palmdale 6′ quadrangle in Elizabeth Lake quadrangle along Southern Pacific R. R. into Saugus 6′ quadrangle in Camulos quadrangle

Vincent, 500 feet north of station, 500 feet west of center line of T. 5 N., R. 12 W., in corner of jog in fence; iron post stamped "3219 B 1902 40"	3,219.834
Semaphore 4209, top of concrete foundation; northeast corner	3,173.90
Semaphore 4218, top of concrete foundation; south corner	3,076.03
Semaphore box, south side of track; top of box	2,981.69
Semaphore 4237, top of concrete foundation; northeast corner	2,864.93

	Feet
Acton, 2 miles northeast of, north of road, opposite junction of Aliso Canyon road; iron post stamped "2833 14 1914"	2,833.888
NOTE.—This bench mark was near wash and was reset in 1914 by L. F. Biggs, 2.983 feet higher than found; it had been formerly reset by Mr. Douglas, ranger at Acton, now stationed at Saugus, but it is uncertain whether or not he set it at its former elevation.	
Semaphore 4249, top of concrete foundation; northeast corner	2,781.94
Acton, southwest corner of hotel, in brick wall; bronze tablet stamped "2700 42"	2,701.503
Wooden culvert 427–E; point on northwest corner	2,586.85
Ravenna, 58 feet south of station door, at base of gum tree; iron post stamped "2468 43"	2,468.996
Semaphore 4297, top of concrete foundation; northeast corner	2,387.50
Precise leveling by C. H. Semper in 1902 and L. F. Biggs in 1914	
Semaphore 4313, top of concrete foundation; northeast corner	2,281.82
Semaphore 4324, top of concrete foundation; southwest corner	2,204.07
Semaphore 4336, top of concrete foundation; northwest corner	2,091.90
Russ, 1.700 feet west of west end of switch, 800 feet west of west end of tunnel, on northeast abutment of bridge 434–I, 6 feet from cliff; bronze tablet stamped "1986 1914 44"	1,987.080
Bridge No. 5, Santa Clara County, on northeast corner of rock abutment; chiseled square, marked "U. S. B. M."	1,883.78
Semaphore 3368, top of concrete foundation; southeast corner	1,751.37
Lang semaphore, on southwest corner of cement foundation; chiseled cross, marked "U. S."	1,696.27
Lang, 200 feet west of station, at north edge of railroad right of way; iron post stamped "1690"	1,690.198
Lang, 1.1 miles west of, signal box south side of track, top of box	1,678.69
Semaphore 4407, top of concrete foundation; northeast corner	1,626.89
Semaphore 4422, top of concrete foundation; southwest corner	1,540.72
Semaphore 4433, top of concrete foundation; middle of north side	1,480.02
Culvert 444–A (wooden); on southeast corner	1,423.76
Semaphore 4453, top of concrete foundation; 8 inches west of east corner	1,397.53
Semaphore 4466, top of concrete foundation; southwest corner	1,305.75
Precise leveling by L. F. Biggs in 1914 over previous line by C. H. Semper	
From Newhall 6′ quadrangle in Camulos quadrangle southeast along Southern Pacific R. R. to Burbank	
Semaphore 4583, top of concrete foundation; southwest corner	1,273.42
Semaphore 4598, top of concrete foundation; southeast corner	1,206.22
Semaphore 4610, top of concrete foundation; southeast corner	1,106.32
San Fernando, McClay & McClay Co.'s building, on Porter Ave., on wall at southeast corner of building (Johnson Ave. is now Porter Ave.); bronze tablet stamped "1066 51"	1,067.096
San Fernando Industrial Arts Building, in top step of north side of west entrance; bronze tablet stamped "1076 1914 52"	1,076.355
Semaphore 4627, top of concrete foundation; northwest corner	1,040.36
Pacoima, 80 feet west of railroad, at southwest corner of road intersection; iron post stamped "1013 53"	1,013.509
Concrete highway, milepost 19; top of	956.02

	Feet
Semaphore 4657, top of foundation, northwest corner, marked "19"	913.80
Concrete highway, milepost 17; top of	875.83
Semaphore 4675, top of concrete foundation; northwest corner	828.63
Roscoe, 1,800 feet northwest of, 50 feet south of highway milepost 16, 50 feet west of railroad, northeast corner of highway concrete culvert; bronze tablet stamped "826 1914"	826.251
Semaphore 4685, top of concrete foundation; northwest corner	768.90
Dundee store, 0.9 mile northwest of, 600 feet west of railroad, near eucalyptus tree; iron post stamped (cap has been removed and building removed)	760.243
Concrete highway, milepost 14; top of	711.14
Concrete highway, milepost 13; top of	642.14
Semaphore 4718, top of concrete foundation; southeast corner	573.74

Precise leveling by the U. S. Coast and Geodetic Survey in 1920

Along Southern Pacific R. R. from Los Angeles to point about 3 miles beyond San Gabriel, thence along highways north and east to Pasadena base line, along the entire length of base, thence south to Ontario, and west to Pomona. Spur lines to Monrovia, Azusa, Covina, and San Dimas

Los Angeles, about 3.25 miles north of, in northern end of Southern Pacific R. R. yards, on top of east capstone of south abutment of first trestle over Los Angeles River, about 0.5 mile north of steel bridge of Atchison, Topeka & Santa Fe Ry.; a rounded knob (U. S. C. & G. S. b. m. T–32)	329.009
Los Angeles, about 2.75 miles north of, Atchison, Topeka & Santa Fe Ry. bridge 140–A over Los Angeles River, in top of curved surface on south end of concrete wing of west abutment; lead plug with copper nail (U. S. C. & G. S. b. m. U–32)	317.102
Los Angeles, about 2.75 miles north of, Atchison, Topeka & Santa Fe Ry. bridge 140–A over Los Angeles River, on north end of first pier from west end; lead plug with copper nail, marked "U. S. B. M." (mean by Senseney from V–32)	309.949
Los Angeles, at junction of North Spring and Baker streets, in west face of three-cornered brick building of Howard Auto Co., 1637 North Spring St.; a Geological Survey bronze tablet stamped "306" (U. S. C. & G. S. b. m. V–32)	306.450
Los Angeles, at entrance to train shed of Arcade Southern Pacific R. R. depot, inside the iron fence separating waiting room from train shed, in side wall where the fence joins the building and about 6 feet from main doorway to waiting room; brass disk (U. S. C. & G. S. b. m. W–32)	256.735
Shorb, on south side of railroad yards, 99.5 feet from southeast corner of Southern Pacific R. R. depot, 55 feet west of signal tower building; an iron post of Geological Survey stamped "464" (U. S. C. & G. S. b. m. T–36)	464.641
Alhambra, in west corner of Southern Pacific R. R. park; Geological Survey iron post stamped "456" (U. S. C. & G. S. b. m. B–36)	456.817
San Gabriel, 86 feet from northeast corner and 95 feet from northwest corner of Southern Pacific R. R. depot, 7.1 feet west of raingage post; Geological Survey iron post stamped "415" (U. S. C. & G. S. b. m. C–36)	416.220
Savannah, 76 feet from southeast corner of Southern Pacific R. R. depot, which has been burned, 600 feet west of point where road north out of Savannah crosses railroad track, and 15 feet south of track; iron post stamped "300" (U. S. C. & G. S. b. m. E–36)	300.859

Feet

Triangulation station Pasadena West Base, near corporate limit of Arcadia, 460 feet south of intersection of center lines of San Joaquin and Baldwin avenues, 60 feet east from center line of Baldwin Ave., in an open field; standard disk station mark set in concrete ---------- 421.977

Triangulation station Joaquin, in Arcadia, about 30 feet west of center of El Monte Ave., in line with south side of paving of Walnut St., at head of this street; standard disk station mark set in concrete ---------- 381.610

Arcadia, about 2.5 miles south of, 7 feet south of center line and 450 feet east of South Sixth Ave., on land owned by W. Phillips; concrete post with disk in top (U. S. C. & G. S. b. m. H–35)------ 362.256

From Los Angeles east along Southern Pacific R. R. into Puente 6′ quadrangle in adjoining 1° quadrangle. A double-rodded line by H. S. Crowe in 1897, corrected to fit new U. S. Coast and Geodetic Survey precise line at Shorb, Alhambra, and Savannah

NOTE.—Bench mark 333 at East Lake Inn has been removed.

Aurant station, 0.75 mile west of, in top step of brick culvert, on west side of railroad; copper bolt stamped "399"---------- 399.476

From Clement Junction, Los Angeles, west along Southern Pacific R. R. to Home Junction. Over this route a double-rodded line was run by H. S. Crowe in 1897, and additional leveling was done in 1923 as follows: Two lines between Clement Junction and Cienega by H. S. Senseney; two lines between Cienega and Palms by Senseney and Nessler; and three between Palms and Home Junction, two by Nessler and one by Senseney

Los Angeles, in west curb of Compton Ave., 75 feet south of East Twenty-seventh St., 15.1 feet south of south rail of east bound Pacific Electric Ry. track; chiseled square, marked "U. S. B. M. 212.7"---------- 212.73

Los Angeles, at northwest corner of Central Ave. and East Thirty-second St., 3 feet south of fire hydrant, in curb; chiseled square, marked "U. S. B. M. 209.4"---------- 209.47

Los Angeles, at southwest corner of San Pedro and East Thirtieth streets, at fire hydrant, in curb; chiseled square, marked "U. S. B. M. 208.3"---------- 208.27

Los Angeles, at southwest corner of Main and Jefferson streets, at fire hydrant, in sidewalk; chiseled square, marked "U. S. B. M. 200.6"---------- 200.66

Los Angeles, at northeast corner of Exposition Bvd. and Figueroa St., in curb; chiseled square, marked "U. S. B. M. 187.0"---------- 187.08

Los Angeles, 1.5 feet south of south curb of Exposition Bvd. and 30 feet west of west curb of Figueroa St., set flush in concrete post; bronze tablet stamped "S 71 1923"---------- 186.544

Los Angeles, at southwest corner of Exposition Bvd. and Vermont Ave., at fire hydrant, in curb; chiseled square, marked "U. S. B. M. 174.2"---------- 174.23

Los Angeles, 55 feet west of old University station, at northwest corner of Exposition Bvd. and Vermont Ave., 19 feet north of north rail of west-bound Pacific Electric Ry. track; iron post stamped "174"---------- 174.786

NOTE.—This post, described on page 71 of Bulletin 342, was found badly bent and was reset in 1923.

	Feet
Los Angeles, at southwest corner of Exposition Bvd. and Normandie Ave., in curb; chiseled square, marked "U. S. B. M. 160.5"	160.54
Los Angeles, 30 feet east of northeast corner of Western Ave., and Exposition Bvd., between curb and Pacific Electric Ry. track, set flush in concrete post; bronze tablet stamped "A 2 1922"	147.451
Los Angeles, 30 feet south of southeast corner of Western Ave. and Exposition Bvd., at telephone pole, in curb; chiseled square, marked "U. S. B. M. 146.4"	146.27
Los Angeles, 22 feet south of south rail of Pacific Electric Ry. main-line track, at Ninth Ave., 35 feet west of northwest corner of Moulding Supply Co.'s building; iron post stamped "118"	118.734
Airville siding, at northwest corner of concrete foundation of beet rack; head of nail	107.82
Sentous siding, 60 feet west of switch stand at east end of, north side of Pacific Electric Ry. track, in west end of concrete culvert; head of nail	103.43
Culver Junction, 188 feet southeast of center of railroad crossing, 115 feet southeast of station shed, at northeast corner of garden around Globe Flour Mills, on south edge of railroad right of way, in an 8 by 8 by 30 inch concrete post; bronze tablet stamped "13 1922"	108.084
Palms, in south brick wall at southeast corner of warehouse, fifth course of bricks above water table, in center of second brick from corner; bronze tablet stamped "126" (description on p. 71 in Bull. 342 is erroneous)	126.614
Home Junction (Talamantes), 410 feet west of Pacific Electric Ry. telephone booth, 45 feet south of main-line track; iron post stamped "165" (description on p. 71 in Bull. 342 is obsolete)	164.964

NOTE.—The three bench marks at Santa Monica given on page 71 of Bulletin 342 have been destroyed.

Primary leveling by C. W. H. Nessler in 1923

From Home Junction west along Southern Pacific R. R. to Santa Monica. See pages 122–124 for other bench marks in Santa Monica quadrangle

Home Junction, 1.5 miles west of, at Bergamot spur, 45 feet north of main-line track, 10 feet south of telegraph pole 448, on west side of road, in an 8 by 8 by 30 inch concrete post; bronze tablet stamped "1 1922"	152.682
Sunset spur, opposite east switch head, in base of trolley pole, painted "U. S. 154 B. M."; spike	154.02
Santa Monica, 1 mile east of Pacific Electric station, at Fourteenth St. crossing, in base of trolley pole; spike, painted "U. S. 112 B. M."	111.16
Santa Monica, Pacific Electric station, 83 feet west of west end, 60 feet south of center of main-line track, 180 feet east of Ocean Ave., in an 8 by 8 by 30 inch concrete post; bronze tablet stamped "2 1922"	59.415
Santa Monica, at junction of Ocean Ave. and Pico Bvd., in northwest corner of streets; chiseled cross on curbstone, painted "U. S. 46 B. M."	45.18

	Feet
Ocean Park, 300 feet south of Southern Pacific ticket office, and Pacific Electric passenger station, at crossing of Navy St., with Trolley way, in base of trolley pole; spike, painted "U. S. 28 B. M."	27.74
From center of west line of Sawtelle 6′ quadrangle, southeast to Southern Pacific R. R. 1.5 miles west of Home Junction	
Santa Monica, at intersection of Twenty-third St. with San Vicente Bvd., 90 feet southeast of center of Twenty-third St., in base of trolley pole; spike, painted "U. S. 345 B. M."	344.75
Santa Monica, east city limit, at junction of Twenty-sixth St. with San Vicente Bvd., in southwest corner of streets, between curb and sidewalk, in an 8 by 8 by 30 inch concrete post; bronze tablet, stamped "4 1922"	347.779
Intersection of Twenty-sixth St. with Wilshire Bvd., in northwest corner of streets, in base of telegraph pole; spike, painted "U. S. 194 B. M."	193.67
Intersection of Anita Ave. or Cambridge St. with Santa Monica Bvd., in southeast corner of streets; painted square on curbstone, painted "U. S. 204 B. M."	203.95
From point 1.5 miles west of Home Junction south into Venice 6′ quadrangle in adjoining 1° quadrangle	
Bergamot spur, 1 mile south of, at right-angled bend east of National Building, in southwest corner of streets, in base of telegraph pole; spike, painted "U. S. 169 B. M."	168.82
Midway, at intersection of Venice Bvd. and Ballona Road, in southwest corner of streets, on south side of Pacific Electric Ry. tracks, in base of telegraph pole; spike, painted "U. S. 62 B. M."	61.51
From Topango Canyon 6′ quadrangle in Camulos quadrangle northeast along highways to Glendale	
Intersection of Bundy Drive and San Vicente Bvd., 45 feet east of Bundy Drive, in base of trolley pole; spike, painted "U. S. 314 B. M."	313.39
Old Soldiers' Home, at northeast corner of Company 5 barracks, on northeast corner of concrete manhole; chiseled square, painted "U. S. 358 B. M."	357.65
Sunset Cemetery, at northeast corner of, 0.75 mile east of Soldiers' Home, on south side of Wilshire Bvd., 3 feet north of cemetery signpost, in concrete post; bronze tablet stamped "5 1922"	332.151
Los Angeles Country Club, on east side of Wilshire Bvd. entrance and north side of Wilshire Bvd., in base of telephone pole; spike, painted "U. S. 354 B. M."	353.56
Junction of Santa Monica Bvd. and Benedict Canyon road, between Pacific Electric tracks; spike in base of trolley pole, painted "U. S. 268 B. M."	268.08
Junction of Benedict Canyon road with Sunset Bvd., in southwest corner of streets; chiseled square on curbstone, painted "U. S. 359 B. M."	358.41
Sunset Bvd., at east end of widest part of the boulevard, on north curb; chiseled square, painted "U. S. 399 B. M."	399.01

	Feet
Sunset Bvd., 232.4 feet southwest of P. B. M., on south curb; chiseled cross	344.40
Junction of Sunset Bvd., Holloway Drive, and Horn Ave., in northeast corner of streets, between curb and sidewalk, in an 8 by 8 by 30 inch concrete post; bronze tablet stamped "6 1922"	345.642
Hollywood Hills, at junction of Harper Ave. with Sunset Bvd., in west corner of streets; chiseled square on curbstone, painted "U. S. 399 B. M."	398.26
Gardener Junction, at intersection of Gardener St. with Sunset Bvd., on northeast corner of streets, east of car tracks; chiseled square on curbstone, painted "U. S. 351 B. M."	350.37
Hollywood, at intersection of Franklin and Vista Del Mar avenues, in northwest corner of streets; spike in base of telegraph pole, painted "U. S. 440 B. M."	440.12
Hollywood, at intersection of Western Ave. and Los Feliz Bvd., 800 feet north of Catholic school, in southeast corner of streets, between curb and sidewalk, in an 8 by 8 by 30 inch concrete post; bronze tablet stamped "8 1922"	503.629
Glendale, 2.5 miles west of, at junction of Los Feliz Bvd. and North Vermont Ave., in northeast corner of streets, in base of power pole; spike, painted "U. S. 538 B. M."	537.76
Glendale, 1.7 miles west of, on south side of Los Feliz Bvd., in base of telegraph pole; spike, painted "U. S. 535 B. M."	534.84
Glendale, 0.8 mile west of, in south wing of southwest end of Los Feliz Bvd. bridge over Los Angeles River, in top of vertical wing timber; spike, painted "U. S. 396 B. M."	396.01
From point near northwest corner of Hollywood quadrangle south along highways to Southern Pacific R. R.	
Sherman, 0.5 mile west of, at west city limits, between Santa Monica Bvd. and Pacific Electric Ry. tracks, on east end of concrete culvert; chiseled cross, painted "U. S. 228 B. M."	227.11
Sherman, 0.5 mile west by 1 mile south of, at junction of Doheny Drive with Wilshire Bvd., in northwest corner of streets, on curbstone; chiseled square, painted "U. S. 184 B. M."	183.55
Sherman, 0.5 mile west by 2 miles south of, 2 miles north of Culver City, at junction of Arnes St. and Pico Bvd., in northeast corner of streets, in an 8 by 8 by 30 inch concrete post; bronze tablet stamped "12 1922"	133.720
Culver City, 1 mile north of, at junction of Guthrie and Arnes avenues, in northeast corner of streets, in base of telephone pole; spike, painted "U. S. 138 B. M."	137.29
Reference mark, 18 feet east of P. B. M., in foundation of lamppost; chiseled square	106.43
Culver Junction, 188 feet southeast of center of railroad crossing, 115 feet southeast of station shed, at northeast corner of garden around Globe Flour Mills, on south edge of railroad right of way, in an 8 by 8 by 30 inch concrete post; bronze tablet stamped "13 1922"	108.084
Culver Junction, 1.1 miles southwest of, 200 feet west of Culver City substation, on west side of highway and north side of car tracks, in base of power pole; spike, painted "U. S. 70 B. M."	69.52

Primary leveling by H. S. Senseney in 1923

From southeast corner of Burbank quadrangle south along highways to Southern Pacific R. R.

	Feet
Nessler's P. B. M. No. 8, 1922	503.629
Los Angeles, intersection of Western Ave. and Hollywood Bvd.; top of traffic button	391.45
Los Angeles, at southwest corner of Western Ave. and Santa Monica Bvd., at fire hydrant, in curb; chiseled square, marked "U. S. B. M. 324.1"	323.89
Los Angeles, at southwest corner of Western Ave. and Third St., at fire hydrant, in curb; chiseled square, marked "U. S. B. M. 227.9"	227.67
Los Angeles, 60 feet north of northwest corner of Western Ave. and Wilshire Bvd., in curb; chiseled square, marked "U. S. B. M. 198.3"	198.06
Los Angeles, 50 feet north of northwest corner of Western Ave. and Wilshire Bvd., between curb and sidewalk, set flush in concrete post; bronze tablet stamped "A 1 1922"	197.925
Los Angeles, at northwest corner of Western Ave. and Pico St., at fire hydrant, in curb; chiseled square, marked "U. S. B. M. 201.0"	200.82
Los Angeles, 20 feet south of southwest corner of Western Ave. and Adams St., in curb; chiseled square, marked "U. S. B. M. 182.8"	182.60
Los Angeles, 30 feet south of southeast corner of Western Ave. and Exposition Bvd., at telephone pole, in curb; chiseled square, marked "U. S. B. M. 146.4"	146.26
Los Angeles, 30 feet east of northeast corner of Western Ave. and Exposition Bvd., between curb and Pacific Electric Ry. track, set flush in concrete post; bronze tablet stamped "A 2 1922"	147.451

From Southern Pacific R. R. near east border of Hollywood quadrangle south along highways into Inglewood 6′ quadrangle, in adjoining 1° quadrangle

Los Angeles, at southeast corner of Western and Vernon avenues, in curb; chiseled square, marked "U. S. B. M. 139.3"	139.17

From point near center of east line of Hollywood 6′ quadrangle west along highways through center of that quadrangle

Los Angeles, at northwest corner of Wilshire Bvd. and Rosamore Ave., in curb; chiseled square, marked "U. S. B. M. 204.8"	204.55
Los Angeles, at northwest corner of Wilshire Bvd. and Rosamore Ave., in curb; chiseled square, marked "U. S. B. M. 193.8"	193.51
Los Angeles, on south side of Wilshire Bvd., at north end of parking of McCarthy Vista, in curb; chiseled square, marked "U. S. B. M. 150.5"	150.18
Los Angeles, on east side of McCarthy Vista, 75 feet south of Wilshire Bvd., 0.9 foot east of curb, in concrete post; bronze tablet stamped "A 12 1922"	150.289
Los Angeles, at northwest corner of Wilshire Bvd. and Pruess Road, in concrete culvert; chiseled square, marked "U. S. B. M. 161.5"	161.10
Nessler's B. M., at Wilshire Bvd. and Doheny Drive	183.55

From point near northwest corner of Whittier 6′ quadrangle in adjoining 1° quadrangle northwest along highway and Union Pacific R. R. to Clement Junction

	Feet
Montebello, 0.9 mile east of, on south side of Whittier Bvd., 30 feet from Union Pacific R. R. crossing, in south end of east abutment of concrete culvert; chiseled square, marked "U. S. B. M. 179.3"	179.31
Montebello, 20 feet east of South Cedar St., on south side of Union Pacific tracks, in concrete base of electric warning signal; chiseled square, marked "U. S. B. M. 204.2"	204.25
Montebello, 0.9 mile west of, in northwest corner of concrete base of semaphore "7.6"; chiseled square, marked "U. S. B. M. 192.1"	192.09
Montebello, 0.9 mile west of, on south edge of Union Pacific right of way, at semaphore "7.6," in concrete post; bronze tablet stamped "A 17 1922"	188.715
Montebello, 2.4 miles west of, in south end of west abutment of concrete culvert "6.16"; chiseled square, marked "U. S. B. M. 160.5"	160.43
Montebello, 2.9 miles west of, 60 feet east of Union Pacific crossing of Telegraph Rd., in northwest corner of concrete base of semaphore "5.8"; chiseled square, marked "U. S. B. M. 157.7"	157.70
Montebello, 3.7 miles west of, at south end of Pasadena Ave., Belvedere Gardens, in southeast corner of concrete base of semaphore "4.9"; chiseled square, marked "U. S. B. M. 166.8"	166.73
Belvedere Gardens, 1 mile west of south end of Pasadena Ave., on south side of Union Pacific track, in northwest corner of concrete base of semaphore "3.8"; chiseled square, marked "U. S. B. M. 183.0"	182.95
Belvedere Gardens, 1 mile west of south end of Pasadena Ave., on north side of Union Pacific track, 3.4 feet east of semaphore "3.9," in concrete post; bronze tablet stamped "A 18 1922"	182.202
Hobart, 100 feet south of Atchison, Topeka & Santa Fe Ry. station, west side of track, in concrete base of gate rods; chiseled square marked "U. S. B. M. 192.0"	191.93
Los Angeles, in northwest corner of Twenty-sixth St. bridge over Los Angeles River; chiseled square marked "U. S. B. M. 215.9"	215.87
Los Angeles, intersection of Twenty-sixth St. and Santa Fe Ave.; top of traffic button	214.1

From northwest corner of Whittier quadrangle north along highway to Southern Pacific R. R. near northeast corner of Alhambra 6′ quadrangle

Ranchito, 2 miles north of, 1 mile south of Rio Hondo, on west side of San Gabriel Bvd., 80 feet south of T road west, on northeast corner of concrete irrigation ditch; chiseled square, marked "U. S. B. M. 198.2"	198.27
Rio Hondo, at southwest corner of crossroads, in northeast corner of concrete foundation of Piuma & Briano's store; chiseled square marked "U. S. B. M. 210.2"	210.27
Rio Hondo, 150 feet west of crossroads, on north side of San Gabriel Bvd., under center of steel tower of power line, in concrete post; bronze tablet stamped "A 15 1922"	208.215

	Feet
Rio Hondo, 0.5 mile west of, on west side of San Gabriel Bvd., directly in front of monument to Joseph L. Kauffman, in curb; chiseled square marked "U. S. B. M. 218.6"	218.62
Rio Hondo, 1.4 miles northwest of, on south side of San Gabriel Bvd., at road forks, in base of telegraph pole; spike, marked "U. S. B. M. 307.7"	307.77
Rio Hondo, 1.9 miles northwest of, on west side of San Gabriel Bvd., 130 feet north of road forks, in base of telegraph pole, spike, marked "U. S. B. M. 330.6"	330.62
Rio Hondo, 2.4 miles northwest of, at northeast corner of San Gabriel Bvd. and Old Mission-La Merced Road, in root of eucalyptus tree; copper nail and washer, marked "U. S. B. M. 275.5"	275.60
Rio Hondo, 3 miles northwest of, 2.5 miles south of San Gabriel Bvd. and Garvey Ave., in southwest corner of curb, in front of service station; chiseled square, marked "U. S. B. M. 273.7"	273.79
Rio Hondo, 3 miles northwest of, 2.5 miles south of San Gabriel, 25 feet north by 90 feet east of intersection of San Gabriel Bvd. and Garvey Ave., in concrete post; bronze tablet stamped "A 16 1922"	270.612
San Gabriel, 2.5 miles south of, at northwest corner of Garvey and Del Mar avenues, in curb; chiseled square, marked "U. S. B. M. 320.5"	320.54
San Gabriel, at northwest corner of Pomona Bvd. and Del Mar Ave., in root of eucalyptus tree; copper nail and washer, marked "U. S. B. M. 339.6"	339.70
San Gabriel, at northwest corner of Del Mar Ave. and Mission Drive, in curb; chiseled square, marked "U. S. B. M. 395.7"	395.78
From Savannah on Southern Pacific R. R. in northwest part of El Monte 6′ quadrangle along highways northeast into northeast quarter of Sierra Madre 6′ quadrangle, thence west into Altadena 6′ quadrangle and south to San Gabriel on Southern Pacific R. R.	
Savannah, south of station, 75.9 feet from southeast corner of station, 1 foot from fence; iron post stamped "300" (U. S. C. & G. S. b. m. E–36)	300.859
Savannah, 0.5 mile northeast of, on Lower Azusa Road, at Baldwin Road, at residence of Mrs. M. Gross, in northwest corner of concrete porch; chiseled square, marked "U. S. B. M. 315.3"	315.42
Savannah, 1.5 miles northeast of, at bend in Elmonte Bvd., in curb; chiseled square, marked "U. S. B. M. 303.1"	303.27
Savannah, 2 miles northeast of, intersection of Elmonte Bvd. and Upper Azusa Road, at northwest corner, in curb; chiseled square, marked "U. S. B. M. 351.0"	351.23
Savannah, 2 miles northeast of, 25 feet north by 25 feet east of intersection of Elmonte Bvd. and Upper Azusa Road, in concrete post; bronze tablet stamped "A 12 1923"	352.323
Savannah, 3 miles northeast of, 2 miles southwest of Monrovia, on south side of Upper Azusa Road at Sixth Ave., in root of walnut tree; copper nail and washer, marked "U. S. B. M. 344.1"	344.39

	Feet
Gabriel triangulation station of the U. S. Coast and Geodetic Survey, 2.5 miles south of Monrovia, 1.3 miles south from intersection of Santa Fe Ry. with California Ave., on east edge of Monrovia dump grounds, 220 feet east of small stream, 39 feet east of center line of old asphalt pavement on Dalton County Road, 0.2 mile north of house owned by J. W. Kelley; standard disk in concrete post	366.315
Monrovia, at southwest corner of California and Euclid avenues, in curb; chiseled square, marked "U. S. B. M. 423.6"	423.95
Monrovia, at southeast corner of California and Olive avenues, at telegraph pole, in curb; chiseled square, marked "U. S. B. M. 559.3"	559.74
Monrovia, at southwest corner of California and White Oak avenues, at telegraph pole, in curb; chiseled square, marked "U. S. B. M. 618.9"	619.35
Monrovia, 25 feet south by 30 feet east of intersection of California and White Oak avenues, in concrete post; bronze tablet stamped "A 13 1923"	620.764
Monrovia, at southwest corner of White Oak and Violet avenues, in curb; leaded plug, marked "U. S. M. B. 528.7"	529.06
Monrovia, 1 mile west of, 1 mile north of Arcadia, on south side of Foothill Bvd., at northeast corner of parking in center of Santa Anita Bvd., in root of eucalyptus tree; copper nail and washer, marked "U. S. B. M. 543.3"	543.70
Monrovia, 2.2 miles west of, at northwest corner of Foothill Bvd. and Baldwin Road, in curb; chiseled square, marked "U. S. B. M. 635.1"	635.52
Monrovia, 2.2 miles west of, on south side of Foothill Bvd., in line with center of Baldwin Road, in concrete post; bronze tablet stamped "A 14 1923"	633.585
Monrovia, 3.1 miles west of, on south side of Foothill Bvd., at Sierra Madre Ave., in culvert; chiseled square, marked "U. S. B. M. 675.5"	675.95
Monrovia, 3.9 miles west of, 0.6 mile east of Lamanda, at northwest corner of Foothill Bvd. and Glen Ave., in root of pepper tree; copper nail and washer, marked "U. S. B. M. 714.2"	714.31
Lamanda, at southwest corner of Foothill Bvd. and Daisy Ave., in curb, at telegraph pole; chiseled square, marked "U. S. B. M. 740.3"	740.77
Lamanda, 40 feet south by 20 feet east of intersection of Foothill Bvd. and Daisy Ave., in concrete post; bronze tablet stamped "A 18 1923"	739.997
Lamanda, intersection of Colorado St. and Rose Ave.; top of traffic button	721.08
Lamanda, at southwest corner of San Gabriel Bvd. and San Pasqual St., in curb; chiseled square, marked "U. S. B. M. 665.7"	666.17
Lamanda, 0.7 mile south of, at southeast corner of San Gabriel Bvd. and Huntington Drive, in curb; chiseled square, marked "U. S. B. M. 595.8"	596.20

	Feet
Lamanda, 1.2 miles south of, 1 mile north of San Gabriel, 25 feet north by 20 feet west of intersection of San Gabriel Bvd. and Melville Ave., in concrete post; bronze tablet stamped "A 16 1923"	531.357
San Gabriel, at northwest corner of San Gabriel Bvd. and Las Tunas Drive, in root of eucalyptus tree; spike and washer, marked "U. S. B. M. 434.0"	434.27

From point near southwest corner of Sunland 6′ quadrangle along highways south 4 miles (leveled twice), thence west across Van Nuys 6′ quadrangle into Reseda quadrangle, thence north and east around northwest corner of Van Nuys quadrangle to North Sherman Way station

[Preliminary adjustment of 0.22 feet in east 17 miles of line. Line should be releveled]

Burbank, 4.9 miles northwest of, 4 meters northeast of center line of track, 0.6 meter below track, railroad mileage 458.1, in northeast end of southeast abutment of concrete culvert 458–B; nail sunk in horizontal surface of concrete (U. S. C. & G. S. b. m. B–32)	746.793
Van Nuys, 3 miles east of, on west side of Pacoima Ave., 230 feet north of Victory Bvd., in root of eucalyptus tree; copper nail and washer, marked "U. S. B. M. 694.9"	694.83
Van Nuys, 3 miles east by 1 mile south of, at southeast corner of Pacoima Ave. and El Nido St., in root of pepper tree; spike and washer, marked "U. S. B. M. 659.1"	659.06
Van Nuys, 3 miles east by 2 miles south of, at southeast corner of Pacoima Ave. and Camarillo St., in root of pine tree; copper nail and washer	632.52
Van Nuys, 3 miles east by 2 miles south of, 65 feet north by 20 feet east of intersection of Pacioma Ave. and Camarillo St., in concrete post; bronze tablet stamped "A 17 1923"	632.572
Van Nuys, 3 miles east by 3 miles south of, at northeast corner of Pacoima Ave. and Ventura Bvd.; head of nail sunk in concrete culvert, marked "U. S. B. M. 619.0"	618.93
Van Nuys, 2 miles east by 3 miles south of, at northeast corner of Ventura Bvd. and Diaz St.; head of nail sunk in concrete culvert, marked "U. S. B. M. 633.7"	633.66
Van Nuys, 1 mile east by 2.75 miles south of, at northwest corner of Ventura Bvd. and Woodman Ave., on metal base of lamp-post; chiseled square	640.53
Van Nuys, 1 mile east by 2.75 miles south of, 30 feet south by 25 feet east of intersection of Ventura Bvd. and Woodman Ave., in concrete post; bronze tablet stamped "A 18 1923"	641.473
Van Nuys, 2.5 miles south of, at northeast corner of Ventura Bvd. and Sherman Way, in concrete culvert; chiseled square, marked "U. S. B. M. 657.2"	657.09
Van Nuys, 2.5 miles south by 1 mile west of, at northeast corner of Ventura Bvd. and Saugus Ave., in concrete base of lamp-post; chiseled square, marked "U. S. B. M. 707.8"	707.75
Van Nuys, 2.25 miles south by 2 miles west of, at northwest corner of Ventura Bvd. and Woodley Ave., in concrete base of lamp-post; chiseled square	729.66

	Feet
Van Nuys, 2.25 miles south by 2 miles west of, 25 feet north by 35 feet west of intersection of Ventura Bvd. and Woodley Ave., in concrete post; bronze tablet stamped "A 19 1923"	729.479
Van Nuys, 2 miles south by 3 miles west of, 30 feet south by 30 feet east of intersection of Ventura Bvd. and Balboa Ave., on city water meter; chiseled square, marked "U. S. B. M. 769.7"	769.61
Van Nuys, 1 mile south by 3 miles west of, at southwest corner of Balboa Ave. and El Nido St., at sign post; top of iron pipe; marked "714.8"	714.64
Van Nuys, 0.5 mile south by 3 miles west of, at Encino siding, 6.6 feet west of northeast corner of warehouse, in concrete post; bronze tablet stamped "A 20 1923"	709.660
Van Nuys, 0.5 mile north by 3 miles west of, at southwest corner of Balboa Ave. and Vanowen St., in concrete base of valve of water main; chiseled square, marked "U. S. B. M. 736.4"	736.20
Van Nuys, 1 mile north by 3 miles west of, at southeast corner of Balboa Ave. and Sherman Way, at lamp-post, in curb; chiseled square, marked "U. S. B. M. 755.4"	755.28
Van Nuys, 1 mile north by 2 miles west of, at southeast corner of Sherman Way and Woodley Ave., 3.3 feet east of lamp-post, in curb; chiseled square	752.38
Van Nuys, 1 mile north by 2 miles west of, at southeast corner of Sherman Way and Woodley Ave., 5.3 feet east of lamp-post and 2.4 feet south of curb, in concrete post; bronze tablet stamped "A 21 1923"	752.781
Van Nuys, 1 mile north by 1 mile west of, at southwest corner of Sherman Way and Saugus Ave., 4.4 feet west of end of curb, in curb; chiseled square, marked "U. S. B. M. 755.7"	755.49
Van Nuys, 1 mile north of, 150 feet north by 25 feet west of North Sherman Way station, 24 feet east of Pacific Electric track to Owensmouth, 12 feet north of end of curb, in curb at telegraph pole; chiseled square, marked "U. S. B. M. 742.6"	742.38
Burbank, 8 miles northwest of, railroad mileage 455; at crossing of Pacific Electric Ry. and Southern Pacific R. R., in southwest end of northwest abutment of highway concrete culvert, 20 meters west of center line of Pacific Electric track, 15 meters northeast of center line of Southern Pacific track, 20 meters northeast of Raymer tower; red metal disk (C. & G. S. b. m. A–32)	777.003

From point near center of east line of Van Nuys 6′ quadrangle along highways east to Universal City (leveled twice), thence northeast to Burbank

[Adjustment of 0.3 foot has been made in this line between the latter points]

Universal City, 1 mile west of, at northwest corner of Ventura Bvd. and Foster Ave., in west end of concrete culvert; head of nail, marked "U. S. B. M. 590.9"	590.88
Universal City, 60 feet north of junction of Ventura and Lankershim boulevards, in front of Walker's Tea Room, in concrete post; head of copper nail, marked "U. S. B. M. 588.4"	588.36

	Feet
Universal City, 0.5 mile north of, on north side of First St., 65 feet east of Lankershim Bvd., in root of walnut tree; copper nail and washer, marked "U. S. B. M. 574.7"	574.71
Universal City, 0.5 mile north of, 15 feet north by 15 feet east of intersection of Lankershim Bvd. and First St., in concrete post; bronze tablet stamped "A 24 1923"	574.997
Universal City, 1 mile northeast of, 140 feet north of Second St., on east side of Lequna Ave., in root of walnut tree; copper nail and washer, marked "U. S. B. M. 565.4"	565.38
Universal City, 1.25 miles northeast of, 3 miles southwest of Burbank, at northwest corner of Olive and Pass avenues, in root of second cedar tree west of corner; spike, marked "U. S. B. M. 547.7"	547.77
Burbank, 2 miles southwest of, at southwest corner of Olive Ave. and Buena Vista St., in top of stump; spike marked "U. S. B. M. 529.5"	529.67
Burbank, 2 miles southwest of, 25 feet south by 40 feet west of intersection of Olive Ave. and Buena Vista St., in concrete post; bronze tablet stamped "A 23 1923" (destroyed, 1924)	529.480
Burbank, at northeast corner of Olive Ave. and Main St., at fence corner, in top of stake driven in iron pipe, head of nail, marked "U. S. B. M. 547.4"	547.57
Burbank, in City Hall, at main entrance, just north of northeast end of first step, in sidewalk, at foot of east footing; red metal disk (U. S. C. & G. S. b. m. H–32)	622.266

At Santa Monica near east border of Topango Canyon 6′ quadrangle

NOTE.—The old bench marks at Santa Monica had been destroyed.

Santa Monica, at junction of California and Ocean avenues, on west side of Ocean Ave.; chiseled square on curbstone, painted "U. S. 105 B. M."	104.23
Santa Monica, at junction of San Vicente Bvd. and Ocean Ave., in northeast corner of streets, between curb and sidewalk, in an 8 by 8 by 30-inch concrete post; bronze tablet stamped "3 1922"	162.323
Santa Monica, at junction of Ninth St. and San Vicente Bvd., in southwest corner of streets; nail driven into crack between two adjoining curbstones in a painted square, "U. S. 226 B. M." painted on curbstone	225.75

Primary leveling by C. W. H. Nessler in 1923

From point near Ranchita, Whittier quadrangle, northeast along highways through southeast part of El Monte 6′ quadrangle into Puente 6′ quadrangle of adjoining 1° quadrangle

Whittier, 3 miles north of, in southwest corner of T road west opposite northwest corner of cemetery, in concrete post; bronze tablet stamped "M 1 1923"	252.887
Reference mark, 50 feet east of bench mark; in west end of concrete culvert; chiseled square	252.99
Whittier, 3.75 miles northeast of, at road forks, 340 feet northwest of Mill District School, in concrete culvert; metal plug, marked "U. S. 230.4 B. M."	230.43

	Feet
Whittier, 4.6 miles northeast of, in northeast end of concrete highway bridge over San Jose Creek, on guard rail; chiseled square, marked "U. S. 237.9 B. M."	237.91
Whittier, 5.3 miles northeast of, on west side of road to Puente, 45 feet southwest of Union Pacific R. R. crossing, on south edge of Union Pacific right of way, in concrete post; bronze tablet stamped "M 2 1923"	253.447
Reference mark is 75 feet northeast of B. M., white square painted on northwest corner of concrete foundation for semaphore 140	254.06
Hill Grove, 1.7 miles west of, at northwest end of Union Pacific R. R. steel bridge over San Jose Creek, in west end of northwest concrete retaining wall; chiseled square, marked "278.9 B. M."	278.94

Primary leveling by H. S. Senseney in 1923

From Lamanda Park along highways west and south through center of Altadena 6′ quadrangle to Shorb in Alhambra 6′ quadrangle

Pasadena, at northeast corner of Santa Anita Ave. and Villa St., in top of stump; copper nail and washer, marked "U. S. B. M. 798.8"	799.29
Pasadena, at northwest corner of Villa St. and Allen Ave., at telegraph pole, in curb; chiseled square, marked "U. S. B. M. 831.3"	831.81
Pasadena, intersection of Villa St. and Hill Ave.; center of sewer trap	834.40
Pasadena, at southwest corner of Villa St. and Wilson Ave., in curb; chiseled square, marked "U. S. B. M. 850.3"	850.84
Pasadena, 15 feet south by 25 feet east of intersection of Villa St. and Lake Ave., between curb and sidewalk, set flush in concrete post; bronze tablet stamped "S 63 1923" (reset in 1924)	868.926
Pasadena, at southwest corner of Villa St. and Lake Ave., at telephone pole, in curb; chiseled square	869.05
Pasadena, intersection of Villa St. and Los Robles Ave.; center of sewer trap	885.60
Pasadena, at southwest corner of Villa St. and Fair Oaks Ave., in curb; chiseled square, marked "U. S. B. M. 892.4"	892.90
Pasadena, at southwest corner of Fair Oaks Ave. and Walnut St., at fire hydrant, in curb; chiseled square, marked "U. S. B. M. 862.2"	862.66
Pasadena, at southwest corner of Orange Grove and Live Oaks avenues, at telephone pole, in curb; chiseled square, marked "U. S. B. M. 908.1"	908.65
Pasadena, 30 feet south by 55 feet east of intersection of Orange Grove Ave. and California St., between curb and sidewalk, set flush in concrete post; bronze tablet stamped "S 64 1923"	828.424
Pasadena, at southwest corner of Orange Grove Ave. and California St., at lamp-post, in curb; chiseled square	828.30
Pasadena, on south side of Oliver St., and in line with east curb of Orange Grove Ave., in curb; chiseled square, marked "U. S. B. M. 762.4"	762.87
South Pasadena, at southeast corner of Mission St. and Meridian Ave., at telephone pole, in curb; chiseled square, marked "U. S. B. M. 671.9"	672.38

	Feet
South Pasadena, at southeast corner of Fremont Ave. and Oak St., at telephone pole, in curb; chiseled square	613.33
South Pasadena, 25 feet south by 50 feet east of intersection of Fremont Ave. and Oak St., between curb and sidewalk, set flush in concrete post; bronze tablet stamped "S 65 1923"	613.663
Alhambra, at southwest corner of Fremont Ave. and Main St., at telephone pole, in curb; chiseled square, marked "U. S. B. M. 522.1"	522.52

From point near Lamanda Park along highways north and northwest to Altadena, thence south to Pasadena in Altadena 6′ quadrangle

Pasadena, on west side of Santa Anita Ave., at T road east to Preston rock crusher, in concrete culvert; head of nail, marked "U. S. B. M. 888.3"	888.82
Pasadena, at northwest corner of Santa Anita and New York avenues, in north end of concrete culvert; head of nail, marked "U. S. B. M. 981.1"	981.59
Altadena, 240 feet west of entrance to 2285 Foothill Bvd., on north side of road, in concrete culvert; head of nail, marked "U. S. B. M. 1,182.2"	1,182.77
Altadena, 45 feet north of center of Altadena Drive and 1.3 feet west of west curb of Allen Ave., set flush in concrete post; bronze tablet stamped "S 66 1923"	1,367.865
Altadena, at northwest corner of Altadena Drive and Allen Ave., in curb; chiseled square	1,365.94
Altadena, at southeast corner of Foothill Bvd. and Holliston Ave., in concrete culvert; head of nail, marked "U. S. B. M. 1,377.3"	1,377.91
Altadena, at southeast corner of Foothill Bvd. and Lake Ave., in concrete culvert; chiseled square, marked "U. S. B. M. 1,357.0"	1,357.60
Altadena, at northwest corner of Piedmont and Marengo avenues, in concrete culvert; head of nail, marked "U. S. B. M. 1,344.6"	1,345.27
Altadena, at northwest corner of Piedmont and Fair Oaks avenues, in concrete culvert; lead plug, marked "U. S. B. M. 1,329.0"	1,329.69
Altadena, at northeast corner of Piedmont and Lincoln avenues, in parking in front of service station, in concrete post; bronze tablet stamped "S 67 1923"	1,258.022
Reference mark, 135 feet southwest of bench mark "S 67," in top of low stone wall; chiseled square	1,253.29
Altadena, at southeast corner of Lincoln Ave. and Ventura St., in curb; chiseled square, marked "U. S. B. M. 1,178.7"	1,179.33
Pasadena, at northwest corner of Lincoln Ave. and Atlanta St., in curb; chiseled square, marked "U. S. B. M. 1,087.7"	1,088.27
Altadena, at southwest corner of Flintridge Bvd. and Windsor Ave., in concrete culvert; chiseled square, marked "U. S. B. M. 1,098.6"	1,099.18
Devils Gate Dam, 40 feet northwest of west end of, 2.5 feet east of guard rail, in concrete post; bronze tablet stamped "S 68 1923"	1,073.648
Reference mark, 40 feet southeast of bench mark "S 68," at west end of dam, in curb; chiseled square	1,071.18
Pasadena, on west side of Linda Vista Ave., 270 feet south of Inverness Drive, in curb, at fire hydrant; chiseled square marked "U. S. B. M. 1,012.4"	1,012.97

	Feet
Pasadena, on west side of Linda Vista Ave., 85 feet south of El Mirador Drive, in concrete sidewalk; chiseled square marked "U. S. B. M. 948.5"	949.05
Pasadena, 25 feet north by 30 feet west of intersection of Linda Vista Ave. and El Mirado Drive, in concrete post; bronze tablet stamped "S 69 1923"	952.209
Pasadena, at northwest corner of Linda Vista Ave. and Mira Vista Terrace, at telephone pole, in curb; chiseled square marked "U. S. B. M. 835.6"	836.09

From South Pasadena southwest along highways in Altadena and Los Angeles 6′ quadrangles to Los Angeles

Los Angeles, in southeast corner of Pasadena Ave. bridge over Arroyo Seco; head of nail sunk in concrete marked "U. S. B. M. 582.0"	582.40
Los Angeles, at southeast corner of Pasadena Ave. and York Bvd., at fire hydrant, in curb; chiseled square marked "U. S. B. M. 587.2"	587.62
Los Angeles, in south end of parking at Pasadena Ave. and York Bvd., set flush in concrete post; bronze tablet stamped "S 73 1923"	586.451
Los Angeles, at southeast corner of Pasadena Ave. and South Ave. 56, at fire hydrant, in curb; chiseled square marked "U. S. B. M. 532.1"	532.51
Los Angeles, at northeast corner of Pasadena Ave. and South Ave. 50, at fire hydrant, in curb; chiseled square marked "U. S. B. M. 501.0"	501.40
Los Angeles, at southeast corner of Pasadena Ave. and Ave. 39, at telephone pole, in curb; chiseled square marked "U. S. B. M. 386.3"	386.75
Los Angeles, 1 foot north of north curb of Dayton Ave. and 200 feet west of center of Pasadena Ave., set flush in concrete post; bronze tablet stamped "S 72 1923"	386.380
Los Angeles, at northeast corner of Pasadena Ave. and Ave. 32, at telephone pole, in curb; chiseled square, marked "U. S. B. M. 386.5"	386.97
Los Angeles, on south side of Pasadena Ave. at north end of North Daly St., between car tracks; top of traffic button	359.29
Los Angeles, at southwest corner of North Broadway and Daly St., at fire hydrant, in curb; chiseled square, marked "U. S. B. M. 341.9"	342.28

From Belvedere Gardens north along highways through Alhambra 6′ quadrangle to Shorb

Belvedere, at northwest corner of Whittier Bvd. and Pasadena Ave., at telephone pole, in curb; chiseled square, marked "U. S. B. M. 196.8"	196.80
Belvedere, at southeast corner of Mountain View and Grand View avenues, in concrete culvert; chiseled square, marked "U. S. B. M. 314.7"	314.72
Belvedere, at southwest corner of Chicago and Ford avenues, in north end of concrete foundation of pumps of service station; chiseled square, marked "U. S. B. M. 315.1"	315.13

	Feet
Belvedere, on west side of Chicago Ave., where it turns to enter Coyote Pass, in concrete post; bronze tablet stamped "S 53 1923"	307.614
Belvedere, on west side of Chicago Ave., where it turns to enter Coyote Pass, in concrete culvert; chiseled square	308.07
Coyote Pass, on north side of road, 150 feet east of refreshment stand, in concrete culvert; chiseled square, marked "U. S. B. M. 387.8"	387.82
Coyote Pass, at east side of, on north side of road, at road forks, in concrete culvert; top of bolt, marked "U. S. B. M. 413.5"	413.52
Granada Park, 70 feet east of intersection of Hellmen and Fremont avenues, in concrete foundation of gas pump; chiseled square, marked "U. S. B. M. 429.8"	429.82
Alhambra, at northeast corner of Pomona Bvd. and Fremont Ave., at fire hydrant, in curb; chiseled square, marked "U. S. B. M. 445.7"	445.74

From Exposition Grounds, Los Angeles, north and west along Figueroa and Pico streets to Western Ave.

Los Angeles, at southwest corner of Figueroa and Adams streets, at fire hydrant, in curb; chiseled square, marked "U. S. B. M. 201.1"	201.16
Los Angeles, at southwest corner of Figueroa and Washington streets, at fire hydrant, in curb; chiseled square, marked "U. S. B. M. 218.7"	218.80
Los Angeles, at southwest corner of Figueroa and Pico streets, at fire hydrant, in curb; chiseled square, marked "U. S. B. M. 232.5"	232.60
Los Angeles, at northeast corner of building occupied by Bekins Fire Proof Storage Co., at 1335 S. Figueroa St., between north wall of building and paving of alley, in concrete post; bronze tablet stamped "S 77 1923"	231.307
Los Angeles, at southwest corner of Pico St. and Union Ave., 1.2 feet west of fire hydrant, in curb; chiseled square, marked "U. S. B. M. 223.4"	223.48
Los Angeles, at northwest corner of Pico and Hoover streets, 2.7 feet north of fire hydrant, in curb; chiseled square, marked "U. S. B. M. 227.8"	227.95
Los Angeles, at northeast corner of Pico St. and Vermont Ave., at fire hydrant, in curb; chiseled square, marked "U. S. B. M. 224.6"	224.72
Los Angeles, northwest corner of Pico St. and Vermont Ave., 2.2 feet east by 4.8 feet south of northeast corner of building, set flush in concrete post; bronze tablet stamped "S 78 1923"	226.454
Los Angeles, northeast corner of Pico St. and Normandie Ave., at fire hydrant, in curb; chiseled square, marked "U. S. B. M. 214.3"	214.45

From west part of Hollywood north along highways to Universal City

[An adjustment of 0.3 foot has been made in this line]

Hollywood, at intersection of Hollywood Bvd. with Highland Ave., in northwest corner of streets, opposite southeast end of Hotel Hollywood, in an 8 by 8 by 30 inch concrete post; bronze tablet stamped "7 1922" (Nessler's b. m. before removing)	378.702

	Feet
Los Angeles, 19 feet north of north curb of Hollywood Bvd., 210 feet west of west curb of Highland Ave., 20 feet west of main entrance to Hollywood Hotel, in concrete post; bronze tablet stamped "SS 1923" (after removing)	380.784
NOTE.—This b. m. was established from Nessler's b. m. 7 1922 and his post was removed because of improvements in this vicinity.	
Los Angeles, on east side of Highland Ave., 65 feet south of center of Cahuenga Ave., in curb; chiseled square, marked "U. S. B. M. 488.8"	488.68
Los Angeles, in angle between Cahuenga Ave. and Darien St., in curb; head of nail, marked "U. S. B. M. 728.00"	727.87
Los Angeles, on west side of road, at summit of Cahuenga Pass, in telephone pole; railroad spike, marked "U. S. B. M. 770.3"	770.17
Los Angeles, on south side of Pass Ave., 100 feet east of Cahuenga Ave., 28 feet north of Pacific Electric station Hollywood Knolls, in concrete culvert; head of nail, marked "U. S. B. M. 715.5"	715.29
Los Angeles, on north side of Pass Ave., 125 feet east of Cahuenga Ave., 25 feet east of east rail of Pacific Electric tracks, at Hollywood Knolls, in concrete post; bronze tablet stamped "S 70 1923"	714.018
Los Angeles, on north side of Cahuenga Ave., 100 feet west of Fredonia Drive, in telephone pole; railroad spike, marked "U. S. B. M. 616.8"	616.52
Universal City, 60 feet north of junction of Ventura and Lankershim boulevards, in front of Walker's Tea Room, in concrete post; head of copper nail, marked "U. S. B. M. 588.4"	588.36

POLITECHNIKA GDAŃSKA ZAKŁAD GEOLOGII

DEGREE QUADRANGLE 34°–35°, 119°–120°

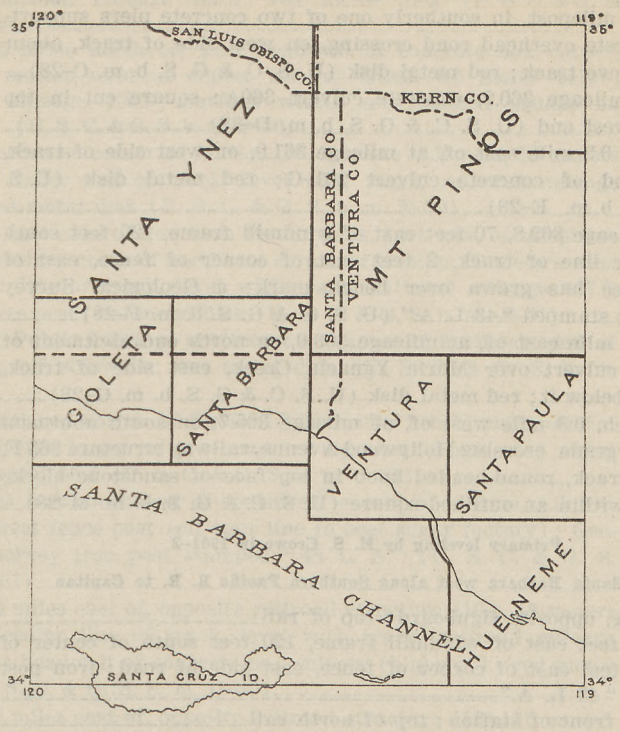


FIGURE 15.—Diagram of degree quadrangle 34°–35°, 119°–120°

GOLETA QUADRANGLE

[Latitude 34° 20′–34° 35′; longitude 119° 45′–120°]

SANTA BARBARA COUNTY

Precise leveling by the U. S. Coast and Geodetic Survey in 1920

East along Southern Pacific R. R.

	Feet
Capitan, 1.8 miles east of, 1 foot west of old milepost 352 (present mileage 351.4), 25 feet north of track; a Geological Survey iron post stamped "109 L. A." (U. S. C. & G. S. b. m. L–28)	112.687
Naples, 0.6 mile north of, at mileage 354.4, on north end abutment of trestle over Dos Pueblos Canyon, west side of track, on top face of top stone block; square cut in masonry (U. S. C. & G. S. b. m. Z–27)	73.609
Naples, opposite station, on central concrete base of support to east one of two large tanks beside track; red metal disk (U. S. C. & G. S. b. m. A–28)	99.035

	Feet
Elwood, 1.7 miles west of, 660 feet east of old milepost 358 (present mileage 357.4), at road crossing, 20 feet north of track, near fence; a Geological Survey iron post stamped "57 L. A." (U. S. C. & G. S. b. m. B–28)	60.584
Elwood, 1 mile north of, at mileage 357.8, near middle of heavy cut north of milepost. in southerly one of two concrete piers supporting concrete overhead road crossing, on west side of track, about 5 feet above track; red metal disk (U. S. C. & G. S. b. m. C–28)	86.069
Coromar, mileage 360.2, concrete culvert 360A; square cut in top face of west end (U. S. C. & G. S. b. m. D–28)	32.688
La Patera, 0.2 mile east of, at mileage 361.9, on west side of track, north end of concrete culvert 261–G; red metal disk (U. S. C. & G. S. b. m. E–28)	26.818
Goleta, mileage 362.8, 70 feet east of windmill frame, 120 feet south of center line of track, 2 feet east of corner of fence, east of road, tree has grown over bench mark; a Geological Survey iron post stamped "43 L. A." (U. S. C. & G. S. b. m. F–28)	46.316
Goleta, 0.9 mile east of, at mileage 363.6, on north end abutment of railway culvert over Maria Ygnacia Creek, east side of track, 1 meter below it; red metal disk (U. S. C. & G. S. b. m. G–28)	77.260
Hope Ranch, 0.8 mile west of, at mileage 365.7, on south abutment of undergrade crossing Hollywood Avenue, railway structure 365 E, east of track, round-headed knob in top face of sandstone block; surface within an outlined square (U. S. C. & G. S. b. m. M–28)	125.914

Primary leveling by H. S. Crowe in 1901–2

From Santa Barbara west along Southern Pacific R. R. to Capitan

Irma siding, opposite signboard; top of rail	161.2
Goleta, 70 feet east of windmill frame, 120 feet south of center of track, 2 feet east of corner of fence, east side of road; iron post stamped "43 L. A."	46.316
Elwood, in front of station; top of north rail	88.4
Elwood, 1.7 miles west of, 660 feet east of milepost 358, at road crossing, 20 feet north of track, near fence; iron post stamped "57 L. A."	60.584
Naples, in front of station; top of north rail	98.5

From Santa Barbara west along road to point near Goleta, thence north over San Marcos Pass to Cold Spring Canyon

Mrs. D. Pico Ruis's house, 45 feet north of northeast corner, 100 feet southwest of road to Laurel Springs, 2 feet south of sandstone boulder 7 by 6 by 6 feet; iron post stamped "1526 L. A."	1,530.136

HUENEME QUADRANGLE

[Latitude 34°–34° 15′; longitude 119°–119° 15′]

VENTURA COUNTY

Precise leveling by the U. S. Coast and Geodetic Survey

Southeast along Southern Pacific R. R.

	Feet
Montalvo, south end of town, opposite railroad structure 403A, 25 meters south of road crossing, 10 meters east of center line of track, 1 meter above railroad mileage 403.3, in east headwall of highway concrete box culvert; red metal disk (U. S. C. & G. S. b. m. P–30)	96.007

	Feet
Montalvo, 0.9 mile south of, opposite milepost 404, highway right of way post, 10 meters east of center line of track, 1 meter below, at north end of highway culvert; tablet (U. S. C. & G. S. b. m. Q–30)	75.856
Montalvo, 1.4 miles south of, west end of south abutment of Santa Clara River bridge, 4 meters west of center line of track, 0.4 meter below, railroad mileage 405.4; red metal disk (U. S. C. & G. S. b. m. R–30)	79.688
Oxnard, 1.5 miles north of, west headwall of concrete box culvert 406A, 4 meters west of center line of track, 0.5 meter below, railroad mileage 406.3; surface within an outlined square on masonry (U. S. C. & G. S. b. m. S–30)	72.411
Oxnard, northeast corner of station, in concrete sidewalk, 15 meters west of center line of track, level with track, railroad mileage 407.8; red metal disk (U. S. C. & G. S. b. m. T–30)	53.015
Oxnard, in east edge of Southern Pacific park, just west of telephone pole, 53 meters north of northeast corner of station, 20 meters west of center line of track, level with track, railroad mileage 407.8, on concrete post; red metal disk (U. S. C. & G. S. b. m. A–31)	52.454
Oxnard, at Public Library, northwest entrance, at northeast end of first step off sidewalk; red metal disk (U. S. C. & G. S. b. m. B–31)	51.260
Oxnard, southeast corner of Public Library, city bench mark, cement post with bolt in top with cement boxing around post; red metal disk in top of post (U. S. C. & G. S. b. m. C–31)	51.732
Oxnard, 445 feet southwest of southwest corner of station, 1.3 feet west of west fence post (off spur line to beet sugar factory); Geological Survey iron post stamped "48 L. A." (U. S. C. & G. S. b. m. D–31)	50.777
Oxnard, 2.5 miles east of, opposite railroad structure 410A, 15 meters west of center line of track, level with track, railroad mileage 410.3, east headwall of concrete box culvert (highway); red metal disk (U. S. C. & G. S. b. m. U–30)	49.754
Oxnard, 4.5 miles east of, opposite railroad structure 412A, 10 meters west of center line of track, level with track, railroad mileage 412.3, east headwall of highway concrete box culvert; surface within an outlined square on masonry (U. S. C. & G. S. b. m. V–30)	48.327
Oxnard, 6.5 miles east of, 0.3 mile south of milepost 414, 15 meters west of center line of track, 1 meter below, railroad mileage 414.3, east headwall of highway concrete box culvert; red metal disk (U. S. C. & G. S. b. m. W–30)	66.794
Camarillo, north of station, in base of road-crossing sign, 15 meters west of center line of track, level with track, railroad mileage 416.6; red metal disk (U. S. C. & G. S. b. m. Z–30)	148.228

Primary leveling by H. S. Crowe in 1900–1901

From Somis southwest along Southern Pacific R. R. (Somis branch) to Sucrosa, thence west to Oxnard, thence north to Montalvo

Springville, 1 mile south of, in T. 2 N., R. 21 W., 90 feet south of junction of Wood and Pleasant Valley roads, 1 foot east of east corner of schoolhouse; iron post stamped "53 L. A."	56.185
Oxnard, in front of station; top of south rail	52.0
Oxnard, 445 feet southwest of southwest corner of station, 1.3 feet west of west fence post; iron post stamped "48 L. A." Recovered by U. S. C. & G. S. 1920	50.777

	Feet
Montalvo, in front of station; top of north rail	98.0
Montalvo, 225 feet northwest of station, 35 feet east of road, 1 foot south of fence, 50 feet north of center of track; iron post stamped "93 L. A."	96.333

From Oxnard south along wagon road to Hueneme, thence east and north to Sucrosa siding

Hueneme, at junction of Market and Main streets, west side of Bank of Hueneme, in eighth row of bricks above sidewalk and second row from corner; bronze tablet stamped "8 L. A."	10.494
Round Mountain, at north foot of, junction of road, 250 feet east of water trough on Conejo road, 2.5 feet west of signboard marked "Hueneme 8.75 m., Conejo county line 14.5 m., Montalvo 13 m., Saticoy 12.5 m."; iron post stamped "30 L. A."	32.338

MOUNT PINOS QUADRANGLE

[Latitude 34° 30′–35°; longitude 119°–119°30′]

KERN, SANTA BARBARA, AND VENTURA COUNTIES

Primary leveling by H. S. Crowe in 1901

From Matilija north along trail to Ozena

	Feet
Matilija Creek, north side of, 50 feet east of junction with Upper North Fork, west side of trail, at mouth of canyon, on sandstone boulder, 3.5 by 2.5 feet; bronze tablet stamped "1589 L. A."	1,592.389
Ortega Hill, at summit; on ridge between North Fork of Matilija River and Sespe River, on boulder 2.5 feet by 3 feet; bronze tablet stamped "4970 L. A."	4,973.515
Sespe River, 450 feet east of small cabin, mouth of canyon, 25 feet east of where trail leaves to go over Pine Mountain, in ledge of sandstone; bronze tablet stamped "4144 L. A."	4,147.221
Pine Mountain, 3 miles south of Ozena; at summit of ridge, 6 feet east of trail, in block of hard rock 18 by 24 inches; bronze tablet stamped "5314 L.A."	5,317.163
Ozena, 10 feet southwest of southwest corner of post office, 10 feet north of wagon road; iron post stamped "3576 L. A."	3,578.891

From Ozena northeast along wagon road to Soldiers' Home Camp near Lubec

Ozena, 6 miles east of, at junction of canyons, 20 feet east of road where road to Lockwood Valley turns north, north end of grade; iron post stamped "4017 L. A."	4,019.521
Cuyama and Lockwood valleys, summit of ridge divide between, 8 feet north of wagon road; iron post stamped "5516 L. A."	5,518.643
Griffin, 1,200 feet northwest of residence of S. Snedden, 2 feet south of corner of fence at intersection, at turn of road; iron post stamped "4871 L. A."	4,873.730
Griffin and Cuddy's ranches, summit of divide between, 25 feet east of road; iron post stamped "5556 L. A."	5,557.814

From Ozena northwest along wagon road to sec. 19, T. 9 N., R. 24 W.

T. 8 N., R. 24 W., sec. 8, south side of, 1.2 feet north of county-line post marked "C. L. 25" on north side, "V" on east side, and "S. B." on south side, 60 feet south of road; iron post stamped "3100 L. A."	3,103.468

	Feet
T. 9 N., R. 24 W., sec. 19, 600 feet south of George Root's adobe house, north edge of road, in corner of fence at junction; iron post stamped "2749 L. A."	2,752.405

SANTA BARBARA QUADRANGLE

[Latitude 34° 20′–34° 35′; longitude 119° 30′–119° 45′]

SANTA BARBARA COUNTY

Precise leveling by the U. S. Coast and Geodetic Survey in 1920

East along Southern Pacific R. R.

	Feet
Hope Ranch, at 367 milepost opposite 366F, on southwest corner of highway bridge which parallels track, about 4 meters east of track at elevation of roadway, just outside of railing; red metal disk (U. S. C. & G. S. b. m. H–28)	163.500
Oliva, 0.4 mile west of, at mileage 367.5, on west side of track, culvert near block signal 367.6; surface within an outlined square on masonry (U. S. C. & G. S. b. m. I–28)	149.895
Santa Barbara, 1.3 miles west of Victoria Street station, at mileage 368.5, in corner of fence at private-road crossing, 300 feet east of east end of through cut, 40 feet north of track, 30 feet east of lone cottonwood tree; a Geological Survey iron post stamped "128 L. A." (U. S. C. & G. S. b. m. J–28)	132.027
Santa Barbara, 0.9 mile west of, at second crossing of Mission Creek, on north abutment of railway bridge, east of track; red metal disk (U. S. C. & G. S. b. m. K–28)	60.148
Santa Barbara, in little hedge-inclosed park immediately east of station, in corner nearest station, beside small fir tree, a granite post 6 by 6 inches in section 4½ feet long, with standard plate set in top (U. S. C. & G. S. b. m. N–28)	13.957
Santa Barbara, at end of seawall at southwest corner of intersection of the Boulevard and State St., in the center of top of rounded post about 1 foot above sidewalk; red metal disk (U. S. C. & G. S. b. m. O–28)	10.335
Santa Barbara, reestablished Geological Survey iron post bench mark; at northeast side of City Hall, 8.5 feet southeast of northeast corner, stamped "37 L. A." (U. S. C. & G. S. b. m. P–28)	40.440
(U. S. C. & G. S. b. m. Q–28) omitted in list.	
Santa Barbara, 1.4 miles southeast of station, at mileage 372.2, on south abutment of railroad plate-girder bridge over Sycamore Creek, on the east side of track; red metal disk (U. S. C. & G. S. b. m. R–28)	15.935
Santa Barbara, 2.1 miles southeast of station, at mileage 372.8, on south end of undergrade crossing 372C, on east side of track, in top sandstone block; round-headed bolt (U. S. C. & G. S. b. m. S–28)	28.195
Santa Barbara, 2.3 miles southeast of, at milepost 373, west of track, on end of extension provided for double track, north abutment, on concrete undergrade crossing 372–E; red metal disk (U. S. C. & G. S. b. m. T–28)	36.991

	Feet
Montecito station, 0.4 mile southeast of, at mileage 374.3, in top masonry block of south abutment of steel deck girder bridge 374A, east of track; round-headed bolt (U. S. C. & G. S. b. m. U–28)	36.972
Miramar station, 0.4 mile southeast of, at mileage 375.1, a rounded knob on south end of stone railing of highway culvert, 15 meters east of railway culvert 375A over creek; surface within an outlined square (U. S. C. & G. S. b. m. V–28)	29.678
Summerland, 0.5 mile west of, at mileage 375.8, on south end of concrete retaining wall 375–Q, on west side of track; red metal disk (U. S. C. & G. S. b. m. W–28)	63.195
Summerland, 30 feet east of east end of station, 1 foot east of telegraph pole, 60 feet north of track; a Geological Survey iron post stamped "52 L. A." (This bench mark is poor.) (U. S. C. & G. S. b. m. X–28)	56.332
Summerland, 1.4 miles southeast of, at mileage 377.6, east of track, opposite railroad culvert 377–D; a rounded knob cut in south end of highway bridge stone railing (U. S. C. & G. S. b. m. Y–28)	57.057
Summerland, 1.9 miles southeast of, at mileage 378.1, on south abutment of railroad culvert 378–C, east of track, in top face of stone block; a round-headed bolt (U. S. C. & G. S. b. m. Z–28)	42.264
Summerland, 2.6 miles southeast of, at mileage 378.7, set in south abutment on west side of roadway of highway concrete bridge with stone railing, opposite railroad culvert 378–L; red metal disk (U. S. C. & G. S. b. m. A–29)	13.356
Carpinteria, 30 feet east of southeast corner of station, 35 feet north of main track, 2 feet east of telegraph pole; a geological Survey iron post stamped "11 L. A." (U. S. C. & G. S. b. m. B–29)	14.449
Carpinteria, 0.4 mile southeast of, on east side of track, on north concrete abutment of railroad trestle over Carpinteria Creek 381–B; round-headed bolt (U. S. C. & G. S. b. m. C–29)	19.600

Primary leveling by H. S. Crowe in 1901

From Carpinteria west along Southern Pacific R. R. to Santa Barbara

Carpinteria, 33 feet east of southeast corner of station, 35 feet north of main track, 2 feet east of telegraph pole; iron post stamped "11 L. A." (U. S. C. & G. S.)	14.449
Serena, at switch stand; top of rail	31.0
Ortega siding, in front of signboard; top of south rail	76.8
Summerland, 30 feet east of east end of station, 1 foot east of telegraph pole, 60 feet north of center of track; iron post stamped "52 L. A."	56.332
Summerland, in front of station; top of rail	56.3
Miramar; top of rail	25.1
Santa Barbara, at northeast side of City Hall, 8.5 feet southeast of north corner; iron post stamped "37 L. A."	40.440
Santa Barbara city bench mark, corner of De La Guerra and Anacopa streets	38.655
Santa Barbara, Victoria St., in front of station; top of north rail	69.1
Santa Barbara, 1.3 miles northwest of Victoria Street station, in corner of fence at private-road crossing, 300 feet east of east end of through cut, 40 feet north of track, 30 feet east of lone cottonwood tree; iron post stamped "128 L. A."	132.027

SANTA PAULA QUADRANGLE

[Latitude 34° 15′–34° 30′; longitude 119°–119° 15′]

VENTURA COUNTY

Primary leveling by H. S. Crowe in 1900–1901

From Sespe southwest along Southern Pacific R. R. (Santa Barbara branch) to Montalvo

	Feet
Santa Paula, 100 feet south of south side of station, at southwest corner of Ojai and Santa Barbara streets; iron post stamped "288 L. A."	290.363
Santa Paula, in front of station; top of rail	292.8
Saticoy, 80 feet south of center of station, at northeast corner of park on railroad reservation; iron post stamped "149 L. A."	151.302
Saticoy, in front of station; top of north rail	151.2

From Saticoy northwest 3 miles along wagon road to Harman Barranca

Harman Barranca, on west side of northeast fork of, at north end of cultivated field on east slope of hill; iron post stamped "620 L. A."	631.572

From Saticoy east along wagon road to Somis

Saticoy, 3.1 miles south of, at southwest corner of Santa Clara and Del Norte avenues, 60 feet west of signpost, in corner stake of ranch; 8-penny wire nail	116.54
Saticoy, 6.2 miles east of, at Center schoolhouse, in northwest corner of yard; iron post stamped "313 L. A."	315.567

From Santa Paula north along wagon road to Sulphur Mountain Springs, thence west to Nordhoff

Sulphur Mountain Springs, 6 feet east of gate to, 50 feet north of cottage, 1 foot south of wire fence on north side of road; iron post stamped "1005 L. A."	1,007.610
Thatcher's school, 600 feet west of, 40 feet north of township corner, at southwest corner of sec. 34, T. 5 N., R. 22 W., south side of road, 6 feet east of telephone pole; iron post stamped "1323 L. A." (elevation by spur 2 miles north of main road)	1,325.516
Nordhoff, 5 feet north of southwest corner stake of schoolhouse lot, 35 feet north of center of road; iron post stamped "743 L. A."	745.389
Nordhoff, in front of station; top of rail	732.1

SANTA YNEZ QUADRANGLE

[Latitude 34° 30′–35°; longitude 119° 30′–120°]

SAN LUIS OBISPO AND SANTA BARBARA COUNTIES

Primary leveling by H. S. Crowe in 1901–2

At Cold Spring Canyon

	Feet
Cold Springs Hotel, south side of driveway to, on first terrace on west side of main road; iron post stamped "1630 L. A."	1,634.431

From Cold Spring Canyon northwest to point near Santa Ynez

	Feet
San Marcos ranch, 100 feet south of old adobe ruin, 30 feet west of road, 20 feet east of gate, in corner of fence; iron post stamped "842 L. A."	845.818
San Marcos ranch, 5.8 miles northwest of, 5 feet north of road, at down-grade turn to cross canyon; iron post stamped "696 L. A."	699.911

From Rafael northeast along trail to Wasioja School

San Rafael Mountain; summit of trail	4,377
Davy Brown's cabin, 80 feet southwest of southwest corner of, 100 feet south of creek crossing, 30 feet west of northwest corner of trail, at northwest corner of fence, in slab of sandstone 2 by 2 feet; bronze tablet stamped "2038 L. A."	2,041.767
Manzana schoolhouse 4.8 miles southeast of, on top of ridge, about 7 feet south of trail, where creek makes big bend to north, in slab of sandstone; bronze tablet stamped "1511 L. A."	1,515.300
Manzana schoolhouse, east of, at foot of slope, 60 feet west of road, 600 feet south of mouth of Manzana Creek, in sandstone boulder, 6 by 5 by 3 feet; bronze tablet stamped "1163 L. A."	1,167.013
Williams Canyon, mouth of, on west bank, 750 feet north of adobe house, 30 feet south of road, in block of sandstone 18 by 30 inches; bronze tablet stamped "1489 L. A."	1,493.344
Williams Canyon, 5.1 miles northwest of mouth of, on north edge of trail, at mouth of small ravine, on top of cement gravel boulder 8 by 5 inches by 4 feet; bronze tablet stamped "3009 L. A."	3,012.980

From sec. 19, T. 9 N., R. 24 W., northwest along Cuyama River road and over ridge to Wasioja

T. 10 N., R. 25 W., sec 33, intersection of east and west and north and south fence lines, 150 feet south of road; iron post stamped "2404 L. A."	2,407.820
Cuyama ranch, at turn of road to house, 300 feet southwest of southwest corner of adobe house, 100 feet east of southwest corner of cattle corral, in southwest corner of fence; iron post stamped "2180 L. A."	2,183.512
Agua Caliente ranch, 2.2 miles west of east boundary of, 30 feet north of road, on flat on Agua Caliente ranch; iron post stamped "1935 L. A."	1,938.492
Green Canyon, mouth of, foot of slope, 15 feet east of road at turn up canyon where road leaves Cuyama River and goes over mesa to Wasioja; iron post stamped "1784 L. A."	1,787.699
Wasioja schoolhouse (3 miles east of Wasioja), 1.5 feet west of northeast corner of building; iron post stamped "2352 L. A."	2,355.563
Wasioja, 1 foot north of northwest corner of residence of J. B. Mallory, in sec. 7, T. 10 N., R. 28 W.; iron post stamped "2393 L. A."	2,396.950

VENTURA QUADRANGLE

[Latitude 34° 15′–34° 30′; longitude 119° 15′–119° 30′]

SANTA BARBARA AND VENTURA COUNTIES

Precise leveling by the U. S. Coast and Geodetic Survey in 1920

Southeast along Southern Pacific R. R.

	Feet
Carpinteria, 0.8 mile south of, 100 feet north of 382 milepost, in south sandstone abutment of railroad culvert 381–C, on east side of track; round-headed bolt (U. S. C. & G. S. b. m. D–29)	40.449
Benham, 0.2 mile north of, at mileage 384.4, about 200 feet south of county line, on top of west portal of undergrade crossing; red metal disk set in cement (U. S. C. & G. S. b. m. E–29)	47.054
Benham, 0.1 mile south of, at mileage 384.5, west end of stone culvert 384–F, set in top block, north side; round-headed bolt (U. S. C. & G. S. b. m. F–29)	40.210
Punta Gorda, 1.6 miles northwest of, 3 meters west of center line of track, 0.7 meter below, railroad mileage 385.4, west end of concrete culvert 385H; red metal disk (U. S. C. & G. S. b. m. A–30)	31.030
Punta Gorda schoolhouse, 600 feet east of, 100 feet west of milepost 386, in north corner of fence at road crossing, 25 feet east of road, railroad mileage 386; iron post stamped "21 L. A." (U. S. C. & G. S. b. m. C–30)	24.997
Seacliff, 0.8 mile northwest of, 4 meters west of center line of track, 0.7 meter below, railroad mileage 388, west end of north abutment of stone culvert 387 A2; red metal disk (U. S. C. & G. S. b. m. B–30)	28.622
Seacliff, just west of waiting room, 10 meters west of center line of track, railroad mileage 388.8, in concrete post; red metal disk (U. S. C. & G. S. b. m. D–30)	17.411
Ventura, 7.7 miles northwest of, 4 meters east of center line of track, 1 meter below, railroad mileage 390.3, in east head wall of concrete box culvert 390–I; surface within an outlined square (U. S. C. & G. S. b. m. E–30)	23.327
Ventura, 7 miles northwest of, opposite railroad structure 301 A, 10 meters south of milepost 391, 8 meters west of center line of track, 1.5 meters below, railroad mileage 391, in east head wall of highway culvert; red metal disk (U. S. C. & G. S. b. m. F–30)	21.945
Dulsh, opposite railroad structure, 15 meters west of center line of track, level with track, railroad mileage 393, in east head wall of highway culvert; red metal disk (U. S. C. & G. S. b. m. G–30)	14.770
Ventura, 2.8 miles northwest of, 15 meters west of center line of track, 3.5 meters below, railroad mileage 395.2, in south end of highway sea wall; red metal disk (U. S. C. & G. S. b. m. H–30)	12.582
Dulsh, opposite railroad structure, 15 meters west of center line of track, level with track, railroad mileage 393, in east head wall of highway culvert; red metal disk (U. S. C. & G. S. b. m. G–30)	14.770
Ventura, 2.8 miles northwest of, south end of highway sea wall, 15 meters west of center line of track, 3.5 meters below, railroad mileage 395.2; red metal disk (U. S. C. & G. S. b. m. H–30)	12.582

	Feet
Ventura, 1.4 miles northwest of, east end of north abutment of Ventura River bridge (north), railroad structure 396D, 4 meters below, 3 meters east of track, railroad mileage 396.6; red metal disk (U. S. C. & G. S. b. m. I–30)	17.585
Ventura Junction, between main line and spur line to Ojai, 8 meters east of center line of track, 1 meter below, railroad mileage 397.2, on concrete post; red metal disk (U. S. C. & G. S. b. m. J–30)	10.207
Ventura, in Southern Pacific park, northwest of station, directly east of two water tanks, 20 meters east of center line of track, level with track, railroad mileage 398.2, on concrete post; red metal disk (U. S. C. & G. S. b. m. K–30)	48.875
Ventura, in southwest corner of city park, on concrete post; red metal disk (U. S. C. & G. S. b. m. L–30)	48.960
Ventura, southeast corner of First National Bank, northeast of main entrance, in horizontal surface of footing, 0.8 meter above sidewalk; red metal disk (U. S. C. & G. S. b. m. M–30)	40.758
Ventura, (old) county courthouse, on east side of main entrance, 2.4 feet west of northeast corner of tower, 1.4 feet above sidewalk; bronze tablet stamped "13 L. A." (U. S. C. & G. S. b. m. N–30)	16.263
Ventura, 2.4 miles southeast of, west end of cement culvert 400, 4 meters west of center line of track, 1 meter below, railroad mileage 400.4; red metal disk (U. S. C. & G. S. b. m. 0–30)	63.793

Primary leveling by H. S. Crowe in 1901

From Montalvo northwest along Southern Pacific R. R. to Carpinteria

Ventura, in front of station; top of north rail	50.0
Ventura, (old) county courthouse, on east side of main entrance, 2.4 feet west of northeast corner of tower, 1.4 feet above sidewalk; bronze tablet stamped "13 L. A." Recovered by U. S. C. & G. S. 1920.)	16.263
Seacliff, in front of station; top of north rail	16.9
Punta Gorda, in front of station; top of rail	19.5
Punta Gorda schoolhouse, 600 feet east of, 100 feet west of milepost 514, in north corner of fence at road crossing, 25 feet east of road; iron post stamped "21 L. A." (Recovered by U. S. C. & G. S. 1920.)	24.997

From Ventura north along Southern Pacific R. R. to Nordhoff

Lacrosse siding, at south end of, center of track	304.8
Lacrosse road crossing, 50 feet west of, opposite signpost marked "Matilija 8.75 m., Nordhoff 6.5 m., Santa Anna schoolhouse 3.5 m., Ventura 7.5 m."; iron post stamped "314 L. A."	316.986
Oakview spur, at switch stand; base of rail	483.4
Mirror Lake, south end of, 45 feet northwest of road crossing, 3 feet south of signpost marked "Matilija 5.75 m., Nordhoff 4.25 m., Ventura 10.5 m."; iron post stamped "626 L. A."	629.012
Mirror Lake; surface of water	613.6
Long Valley spur, opposite waiting room; center of track	635.1
Matilija spur, in front of waiting room; center of track	759.7

From Nordhoff northwest along wagon road to Matilija

Matilija, 100 feet west of post office, at east end of corral, opposite feed barn, in large rock in fence; bronze tablet stamped "955 L. A."	957.843

From Casitas switch west along wagon road to Carpinteria

	Feet
Casitas Pass, summit of, 15 feet north of center of road, near center line of sec. 34, T. 4 N., R. 24 W.; iron post stamped "1155 L. A."	1,158.017
Shepards, 0.2 mile south of, on sec. 25, T. 4 N., R. 25 W., 2 feet north of signpost marked "County line—Ventura 18 m., Santa Barbara 17 m.," near junction of road, on northwest bank of Rincon Creek; iron post stamped "213 L. A."	216.461

DEGREE QUADRANGLE 34°–35°, 120°–121°

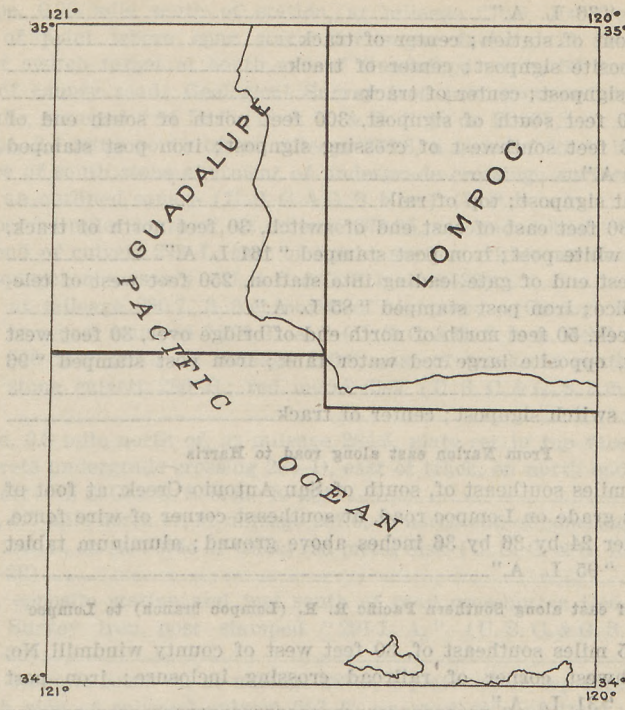


FIGURE 16.—Diagram of degree quadrangle 34°–35°, 120°–121°

GUADALUPE QUADRANGLE

[Latitude 34° 30′–35°; longitude 120° 30′–121°]

SANTA BARBARA AND SAN LUIS OBISPO COUNTIES

Primary leveling by S. N. Stoner in 1903–4

From Santa Maria west along county road to Guadalupe

	Feet
Bennett schoolhouse, in southeast corner of school yard, 8 feet from corner of fence; iron post stamped "144 L. A."_____	147.397

From Guadalupe south along Southern Pacific R. R. to Jalama

Guadalupe, 0.25 mile south of station, 100 feet north of point where spur starts for sugar factory, 30 feet west of switch target at south end of Guadalupe yards, 50 feet north of county road, at south end of fence; iron post stamped "84 L. A."_____	87.198
Waldorf, 3 feet north of signpost; iron post stamped "201 L. A."____	204.967
Casmalia, 100 feet south of, south side of track, 30 feet west of wagon road; iron post stamped "291 L. A." (covered with sand)_____	294.786

	Feet
Narlon sign post, 3 feet north of, east side of track; iron post stamped "129 L. A."	132.615
Lompoc Landing, at road crossing, 60 feet west of crossing signpost, in corner of fence; iron post stamped "158 L. A."	161.926
Surf, 300 feet north of station, north side of wagon road, near southwest point of Y, 6 feet northeast of crossing signpost; iron post stamped "36 L. A."	39.000
Surf, in front of station; center of track	49.4
Weser, opposite signpost; center of track	136.5
Honda, at signpost; center of track	112.1
Honda, 900 feet south of signpost, 300 feet north of south end of switch, 3 feet southwest of crossing signpost; iron post stamped "110 L. A."	114.238
Arguello, at signpost; top of rail	177.2
Arguello, 30 feet east of east end of switch, 30 feet north of track, opposite white post; iron post stamped "161 L. A."	164.289
Sudden, west end of gate leading into station, 250 feet west of telegraph office; iron post stamped "85 L. A."	88.088
Jalama Creek, 50 feet north of north end of bridge over, 30 feet west of track, opposite large red water tank; iron post stamped "96 L. A."	99.376
Jalama, at switch signpost; center of track	106.0

From Narlon east along road to Harris

Narlon, 5 miles southeast of, south of San Antonio Creek, at foot of Barker's grade on Lompoc road, at southeast corner of wire fence, in boulder 24 by 36 by 36 inches above ground; aluminum tablet stamped "95 L. A."	95.412

From Surf east along Southern Pacific R. R. (Lompoc branch) to Lompoc

Baroda, 3.5 miles southeast of, 30 feet west of county windmill No. 11, southwest corner of railroad crossing inclosure; iron post stamped "31 L. A."	33.480

Primary leveling by L. F. Biggs in 1916

Near Guadalupe. (A double-rodded line corrected to agree with U. S. Coast and Geodetic Survey precise leveling over same route)

Guadalupe, 2.4 miles north of, south end of undertrack crossing and bridge 274–A; chiseled square; top of bolt, painted "U. S. 88"	91.74
Guadalupe, 1 mile northeast of, east end of south stone abutment of Santa Maria River railroad bridge 275–C; chiseled square, marked "U. S. 78"	81.81
Guadalupe, 0.25 mile south of, in northeast corner of intersection of crossroads, at southeast corner of I. O. O. F. cemetery, east end of concrete highway culvert; bronze tablet stamped "84 21 1916"	86.898
Bennett School, in southeast corner of yard, 8 feet from corner of fence; iron post stamped "144 L. A."	147.261

Precise leveling by U. S. Coast and Geodetic Survey in 1920

South along Southern Pacific R. R.

Guadalupe, at county line of San Luis Obispo and Santa Barbara counties, on north abutment of railroad bridge over Santa Maria River, west of track and 1 meter below level of rails; red metal disk (U. S. C. & G. S. b. m. D–26)	81.972

	Feet
Guadalupe, branch of Bank of Santa Maria, near southeast corner, facing south, about 4 feet above ground; red metal disk set vertically (U. S. C. & G. S. b. m. G–26)	85.321
Guadalupe, about 0.2 mile north of station, on large water tank at point of siding, on pier nearest track; most westerly bolt; tablet set in top of concrete post (U. S. C. & G. S. b. m. E–26)	145.744
Guadalupe, 0.25 mile south of station, at mileage 276.9, 100 feet north of point where spur starts for sugar factory, 39 feet west of switch target at south end of Guadalupe yards, 50 feet north of county road; Geological Survey iron post protected by four rails, stamped "84 La." (U. S. C. & G. S. b. m. F–26)	87.198
Guadalupe, 2.4 miles south of, at mileage 278.8, a rounded knob in top face of south stone abutment of undergrade crossing; surface within an outlined square (U. S. C. & G. S. b. m.) (S. P. b. m.)	120.859
Guadalupe, 3.4 miles south of, at mileage 279.95, a rounded knob on north end of culvert 279–L, east of track; surface within an outlined square on masonry (U. S. C. & G. S. b. m. H–26)	172.260
Waldorf, at mileage 280.7, 3 feet north of signpost; a Geological Survey iron post stamped "201 L. A." (U. S. C. & G. S. b. m. I–26)	204.967
Waldorf, 500 feet south of, mileage 280.8, east of track, in south end of stone culvert 280–H; red metal disk (U. S. C. & G. S. b.m. J–26)	204.688
Schumann, 0.3 mile north of, at mileage 284.5, plate set in top face of concrete undergrade crossing 284–D, east of track, on north end of culvert (U. S. C. & G. S. b. m. K–29)	393.769
Casmalia, 0.5 mile north of, at mileage 287.0, in north end of concrete culvert 286–G, on east side of track, red metal disk (U. S. C. & G. S. b. m. L–26)	314.691
Casmalia, opposite station and just south of road crossing; a Geological Survey iron post stamped "291 L. A." (U. S. C. & G. S. b. m. M–26)	294.786
Casmalia, 0.4 mile south of, at mileage 287.9, a plate set in top face of north side of railroad culvert 287–F, on west side of track; (U. S. C. & G. S. b. m. N–26)	264.852
Narlon sign post, mileage 295.2, 3 feet north of sign, on east side of track; a Geological Survey iron post stamped "129 L. A." (U. S. C. & G. S. b. m. O–26)	132.615
Narlon, 1.5 miles south of, at mileage 294.7, on the north abutment of railroad deck-girder bridge over Los Alamos Creek, about 5 feet from end of bridge, on east side of track, 1 foot below ties; red metal disk (U. S. C. & G. S. b. m. T–26)	108.960
Tangair, 0.2 mile south of sign, about 300 feet north of point of longest siding, west of track, on concrete railroad culvert 297A; red metal disk (U. S. C. & G. S. b. m. Q–26)	216.112
Tangair, 2.6 miles south of, at mileage 299.8, east of track, 1,700 feet south of block signal, on concrete railroad culvert; red metal disk (U. S. C. & G. S. b. m. R–26)	115.387
Lompoc Junction (Surf post office), 0.7 mile north of, mileage 301.95, on north brick abutment of steel railroad bridge over Santa Inez River, inside west end post, 2 feet above seat and 1 meter below track on west side; red metal disk (U. S. C. & G. S. b. m. S–26)	18.074

	Feet
Lompoc Junction, mileage 302.7, opposite station building, on more southerly of two piers nearest main track, supporting southerly of two large water tanks, head of bolt attaching pier to concrete base (U. S. C. & G. S. b. m. P–26)	50.226
Honda, 0.4 mile south of, at mileage 308.3, on south abutment of steel deck-girder bridge over Canada Honda, east of track, on top face of top block; red metal disk (U. S. C. & G. S. b. m. V–26)	113.658
Arlight (Point Arguello Light station), 0.3 mile north of, near block signal 3111, the top knob of "8" in 1918, on concrete culvert, west of track; surface within an outlined square on masonry (U. S. C. & G. S. b. m. W–26)	185.177
Arlight (Point Arguello Light station), in top of flat-topped concrete reservoir, beside path leading from railroad station to lighthouse, halfway downhill, 2 feet from manhole on west side of reservoir, 2½ feet above ground; red metal disk (U. S. C. & G. S. b. m. X–26)	166.847
Arlight (Point Arguello Light station), 70 meters east of Point Arguello Lighthouse, 15 meters east of board walk leading from keepers' houses to lighthouse, immediately west of two small storehouses, in outcropping bedrock; red metal disk set in cement (U. S. C. & G. S. b. m. Y–26)	60.098
Arguello, 0.5 mile south of, at milepost 313, in center of east end of concrete culvert 313A; red metal disk (U. S. C. & G. S. b. m. A–27)	140.771
Arguello signpost, 0.8 mile south of, at mileage 313.4, east of track, on north abutment of stone culvert 313D, head of spike set in top face of top sandstone block (U. S. C. & G. S. b. m. B–27)	131.660
Milepost 315, 0.2 mile north of, a round-headed bolt set in east end of concrete culvert 314–J (U. S. C. & G. S. b. m. C–27)	115.184
Sudden, mileage 317.3, about 50 meters east of track, 100 meters north of station, in northwest concrete pier supporting steel water tank; red metal disk (U. S. C. & G. S. b. m. D–27)	88.064

LOMPOC QUADRANGLE

[Latitude 34° 25′–35′; longitude 120°–120° 30′]

SANTA BARBARA AND SAN LUIS OBISPO COUNTIES

Precise leveling by the U. S. Coast and Geodetic Survey in 1920

East along Southern Pacific R. R.

	Feet
Jalama, 0.5 mile north of, on top face of north abutment of steel railroad bridge over Jalama Creek, on east side of track; red metal disk (U. S. C. & G. S. b. m. E–27)	102.464
Jalama, 50 feet north of north end of bridge, 30 feet west of track, opposite two large red tanks beside small log house; a Geological Survey iron post stamped "96 L. A." (U. S. C. & G. S. b. m. F–27	99.376
Jalama, 1.4 miles south of, at mileage 322.2, east side of track, on concrete drainpipe 322C, at elevation of track; red metal disk (U. S. C. & G. S. b. m. G–27	180.659

	Feet
Concepcion, 2.3 miles north of, at milepost 323, in southeast corner of concrete drainage tunnel which parallels track and ends at milepost 323, east side of track; surface within an outlined square on masonry (U. S. C. & G. S. b. m. H–27)	173.481
Concepcion, 200 feet northwest of station, 6 feet east of northeast support of water tank; a Geological Survey iron post stamped "112 L. A." (U. S. C. & G. S. b. m. I–27)	116.046
Anacapa siding, at mileage 327.8, west of track, on concrete railway culvert 327–K; red metal disk (U. S. C. & G. S. b. m. J–27)	49.806
Gato, 0.2 mile south of, at mileage 330.2; in top of large granite rock at culvert 330–D, 3 meters east of track, just north of farm-road crossing; surface within an outlined square on masonry (U. S. C. & G. S. b. m. K–27)	60.174
Drake, 1 mile west of, at mileage 333.2, west of track, on culvert 333A; center of "9" in 1918; surface within an outlined square on masonry (U. S. C. & G. S. b. m. L–27)	45.426
Sacate, 1 mile east of tunnel 13, on east end of concrete culvert 335–C, opposite section gang's small log houses; red metal disk (U. S. C. & G. S. b. m. N–27)	88.379
Sacate, 1.4 miles east of, at mileage 336.2, on south abutment of steel trestle over Alegria Canyon, top of a round-headed bolt, probably a S. P. bench mark, on east side of track (U. S. C. & G. S. b. m. O–27)	106.158
Gaviota, 2.2 miles north of, at mileage 337.2, on north abutment of steel trestle over Agua Caliente Canyon, on east side of track; in top face of top stone block; red metal disk (U. S. C. & G. S. b. m. P–27)	99.232
Gaviota, 2.1 miles west of, at mileage 337.3, on south abutment of steel trestle over Agua Caliente Canyon, on west side of track, in top face of top stone block; nail head (probably S. P.) (U. S. C. & G. S. b. m. Q–27)	99.196
Gaviota, 0.7 mile west of, on north abutment of steel trestle over Gaviota Canyon, on west side of track, on top face of top block; round-headed bolt (U. S. C. & G. S. b. m. R–27)	82.510
Gaviota, 125 feet south of southwest corner of station, 80 feet south of center line of track, against fence on edge of bluff over track; Geological Survey iron post stamped "94 L. A." (U. S. C. & G. S. b. m. S–27)	97.392
Aoco, a refinery of the Associated Oil Co., mileage 339.9, on north abutment of steel trestle over Omentero Canyon, on top face of top sandstone block, east side of track; red metal disk (U. S. C. & G. S. b. m. T–27)	83.458
Aoco, mileage 340.0, in solid rock at rocky bluff at head of Associated Oil Co.'s wharf at Gaviota, about 2 meters above low water, 15 feet on south side of head of wharf; red metal disk (U. S. C. & G. S. b. m. M–27)	8.586
Gaviota, 2.8 miles east of, at mileage 342.2, opposite railroad culvert 342–A, in west end of small culvert under highway; red metal disk (U. S. C. & G. S. b. m. U–27)	95.915

	Feet
Gaviota, 4.3 miles east of, at mileage 343.7, on top of south end ornamental railing post of large concrete highway bridge over Arroyo Honda, about 20 meters east of railroad bridge over same canyon, west side of roadway; red metal disk (U. S. C. & G. S. b. m. V–27)	91.023
Tajiguas, 135 feet east of northeast corner of fence around railroad section-house lot, 200 feet north of center of track, 50 feet south of road, 30 feet west of gate in fence; Geological Survey iron post stamped "59 L. A." (U. S. C. & G. S. b. m. W–27)	63.176
Orella, 0.5 mile north of, at milepost 348, on railroad bridge 348A over Refugio Canyon, east of track, on top of top stone block of north abutment; red metal disk set in cement (U. S. C. & G. S. b. m. X–27)	41.030
Capitan, 0.9 mile east of, at mileage 350.8, on south end abutment of railroad trestle over El Capitan Canon, structure 350E; a rounded knob on top face of top stone block, west of track; surface within an outlined square on masonry (U. S. C. & G. S. b. m. Y–27)	108.208

Primary leveling by H. S. Crowe in 1901–2, S. N. Stoner in 1903–4, and C. L. Nelson in 1903

From Capitan west along Southern Pacific R. R. to Gaviota

Capitan, 1.8 miles east of, 1 foot west of milepost 352, 25 feet north of track; iron post stamped "109 L. A."	112.687
Capitan siding, in front of signboard; top of north rail	78.3
Morella siding; top of north rail	50.1
Tajiguas siding, 135 feet east of northeast corner of fence around railroad section-house lot, 200 feet north of center of track, 50 feet south of road, 30 feet west of gate in fence; iron post stamped "59 L. A."	63.176
Gaviota, in front of telegraph office; top of south rail	98.3
Gaviota, 125 feet south of southwest corner of station, 80 feet south of center of track, against fence on edge of bluff above beach; iron post stamped "94 L. A."	97.392

From Gaviota west along Southern Pacific R. R. to Jalama

Santa Anita switch, at road crossing; center of track	67.7
Santa Anita switch, 1 mile west of, 355 feet east of signpost, 185 feet west of milepost 334, 20 feet south of track; iron post stamped "48 L. A."	51.781
Gato switch, at road crossing; top of rail	55.4
Concepcion, 200 feet northwest of station, 6 feet east of northeast support of water tank; iron post stamped "112 L. A."	116.046
Concepcion, in front of station; center of track	114.9

From Gaviota north along wagon road to Los Olivos

Las Cruces, 1 foot south of northeast corner of fence around public school; iron post stamped "339 L. A."	342.443
Nojoqui Pass, summit of, 25 feet south of road, on bench; iron post stamped "879 L. A."	882.596
Old Santa Ynez mission, 35 feet northeast of gate at entrance to grounds, south edge of road, at corner of fence; iron post stamped "495 L. A."	498.715

	Feet
From Los Olivos northwest along Pacific Coast Ry. to Santa Maria, thence northeast along highway to Suey ranch	
Los Olivos, 1 foot north of south corner of public-school building, 1 foot west of brick foundation; iron post stamped "836 L. A."	839.450
Zaca, in front of station; base of west rail	778.0
Calkin siding, west end of, 1 foot south of fence, 60 feet northeast of road crossing; iron post stamped "939 L. A."	942.441
Wigmore siding, in front of signboard; base of south rail	754.6
Los Alamos, road crossing at station; top of rail	572
Los Alamos public school, in northwest corner of lot, 1 foot east of junction of fence lines; iron post stamped "569 L. A."	572.624
Los Alamos, 4 miles west of, at point of curve near telegraph pole, 31 feet south of track; iron post stamped "425 L. A."	428.579
Harris, in front of station; top of east rail	311.6
Harris, 1.5 miles north of, top of bank of through cut, 30 feet east of track, 1 foot west of fence, between two crossings of creek; iron post stamped "378 L. A."	381.670
Blake, in front of station; top of rail	404.0
Divide, in front of station; top of rail	512.5
Graciosa schoolhouse, 15 feet south of northeast corner of fence around, 150 feet west of road crossing, at track; iron post stamped "314 L. A."	317.611
Lake View, in front of station; top of east rail	257.0
Santa Maria, in front of station; top of east rail	206.6
Santa Maria, 140 feet east of east side of Pacific Coast Railway Co.'s station, 2 feet north of corner post of fence, at northeast corner of Chapel St. and railroad reservation; iron post stamped "204 L. A."	207.696
Suey ranch house, at entrance to grounds, 8 feet east of gatepost at junction of fence lines, 20 feet west of center of road; iron post stamped "377 L. A."	380.267
From Santa Ynez Mission east via Santa Ynez to Ferry, thence north via Santa Agueda Creek to San Rafael Mountain	
Santa Ynez, at ferry crossing, 30 feet west of road, 15 feet south of tree to which cable is fastened, on flat; iron post stamped "522 L. A."	526.946
Santa Agueda (St. Agnes) Creek, 5 miles north of junction with Santa Ynez River, line between Donovan ranch and College pasture, 20 feet west of gate in fence, 85 feet west of creek; iron post stamped "807 L. A."	812.116
Los Olivos, 7.5 miles northeast of, 2.7 miles west of Birabent's house, at junction of small canyon below grade that turns north; iron post stamped "1501 L. A."	1,506.076
Birabent's house, 1.7 miles east of, 30 feet south of wagon road, on ridge near summit; iron post stamped "2982 L. A."	2,987.166
From Los Alamos southwest along county road via Santa Rita (Stewart) to Lompoc, thence southeast to Las Cruces	
Los Alamos, 6.3 miles southwest of, on saddle between two ridges, on west side of road, 25 feet south of gate in fence; iron post stamped "1476 L. A."	1,479.929

	Feet
Stewart (Santa Rita), 0.8 mile west of, in southwest corner of field, on north side of road, at corner of lane to barnyard of D. Streeter; iron post stamped "415 L. A."	418.597
Purisima Mission building, 0.3 mile south of ruins of, at southwest corner of road where it turns south, opposite county tank and water trough; iron post stamped "112 L. A."	115.510
Lompoc, at station of Southern Pacific R. R., in front of telegraph office; top of south rail	98.2
Lompoc, at southwest corner of Railroad Ave. and Eighth St., in northeast corner of fence around public schoolhouse lot, 36 feet south of main track; iron post stamped "93 L. A."	96.988
Lompoc, 4.6 miles southeast of, south side of gate, on east side of main road, in east corner of fence at intersection of fences; iron post stamped "238 L. A."	241.371
San Julian ranch, 0.9 mile west of house, in corner of fence, 30 feet south of gate; iron post stamped "603 L. A."	606.465
Las Cruces, 4.1 miles northwest of, 30 feet north of road, 40 feet south of telephone pole, 2.5 feet south of white stake No. 24, in mound of rocks; iron post stamped "927 L. A."	930.152
From Santa Ynez Mission west along road to Stewart	
Santa Rita (Stewart), 4.3 miles southeast of, road at culvert, 6 feet west of road at summit; iron post stamped "552 L. A."	555.322
From Santa Maria southeast via Gary and Canada del Gato to Los Alamos	
Santa Maria, 5.8 miles southeast of, 75 feet south of small frame house on land owned by Mr. Blockman, 50 feet south of poplar tree 18 inches in diameter, 15 feet southwest of right turn in road, 2 feet southwest of fence corner; iron post stamped "322 L. A."	325.220
Gary, 60 feet north and 10 feet east of schoolhouse, 6 feet southwest of northeast corner of fence around schoolhouse; iron post stamped "376 L. A."	379.363
Gary, 4.8 miles southeast of, 70 feet northeast of Hopedale schoolhouse, 150 feet south of road, 20 feet west of fence; iron post stamped "596 L. A."	599.367
Gary, 8 miles southeast of, 12 feet southeast of road at summit; iron post stamped "1252 L. A."	1,255.301

DEGREE QUADRANGLE 35°–36°, 114°–115°

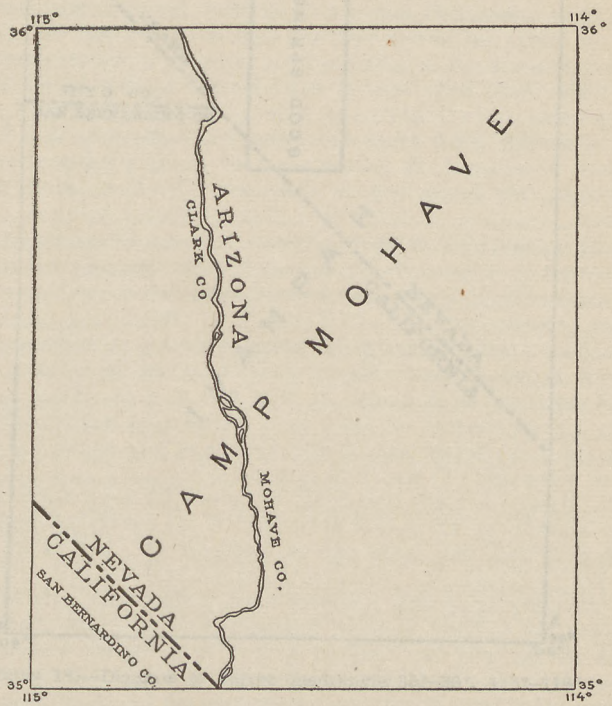


FIGURE 17.—Diagram of degree quadrangle 35°–36°, 114°–115°

CAMP MOHAVE QUADRANGLE

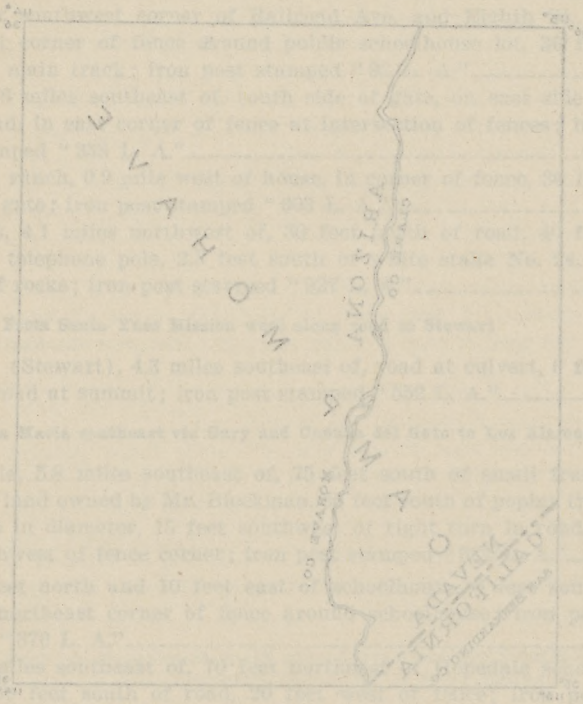
[Latitude 35°–36°, longitude 114°–115°]

SAN BERNARDINO COUNTY

Primary leveling by H. Morrison in 1902

From Fort Mohave south to point 9 miles northwest of Needles

	Feet
Fort Mohave, 4 miles southwest of, on road leading to Needles, on west side of river, at foot of knoll on west side of road; iron post stamped "479 Y"	479.719


ARIZONA
CALIFORNIA

DEGREE QUADRANGLE 35°–36°, 115°–116°

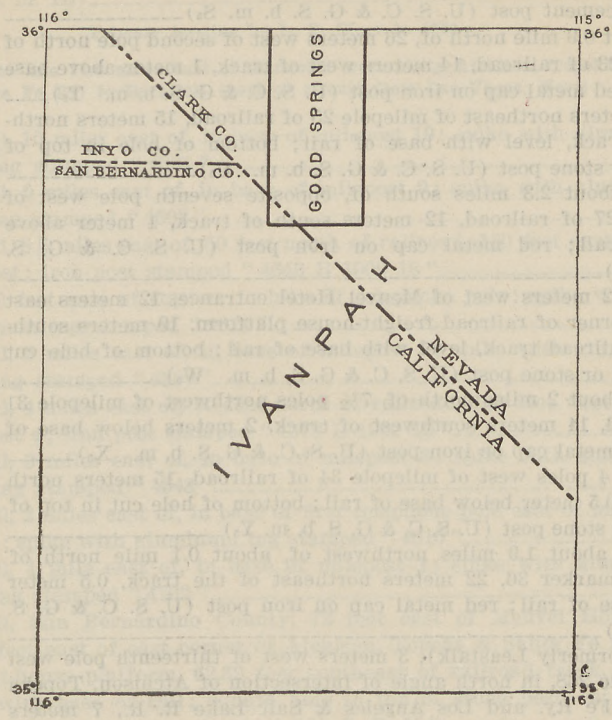


FIGURE 18.—Diagram of degree quadrangle 35°–36°, 115°–116°

IVANPAH QUADRANGLE

[Latitude 35°–36°; longitude 115°–116°]

INYO AND SAN BERNARDINO COUNTIES

Precise leveling by U. S. Coast and Geodetic Survey

From Vontrigger north along Atchison, Topeka & Santa Fe Ry. and Los Angeles & Salt Lake R. R. to Calada

	Feet
Vontrigger, 9 meters northeast of Atchison, Topeka & Santa Fe Ry. track, 4.5 meters east of east corner of railroad water tank; bottom of hole about 25 millimeters square in top of cement or stone post (U. S. C. & G. S. b. m. O_5)	3,369.016
Blackburn, about 1.8 miles south of, 14 meters southwest of railroad track ⅔ meter below base of rail; red metal cap on iron post (U. S. C. & G. S. b. m. P_5)	3,505.495
Blackburn, 8 meters southeast of railroad signboard "Blackburn," 18 meters northeast of track, level with base of rail; bottom of hole in top of cement or stone post (U. S. C. & G. S. b. m. Q_5)	3,709.737

	Feet
Ledge, about 4.7 miles south of, 3.5 meters east of tenth pole southeast of milepole 18 of railroad, 15 meters northeast of track, level with base of rail; red metal cap on iron post (U. S. C. & G. S. b. m. R_5)	4,084.142
Ledge, 2½ poles northwest of milepole 22 of railroad, 8 meters northwest of track, level with base of rail; bottom of hole in top of stone or cement post (U. S. C. & G. S. b. m. S_5)	4,351.077
Ledge, about 0.9 mile north of, 26 meters west of second pole north of milepole 23 of railroad, 14 meters west of track, 1 meter above base of rail; red metal cap on iron post (U. S. C. & G. S. b. m. T_5)	4,395.408
Purdy, 7 meters northeast of milepole 25 of railroad, 15 meters northeast of track, level with base of rail; bottom of hole in top of cement or stone post (U. S. C. & G. S. b. m. U_5)	4,524.243
Barnwell, about 2.3 miles south of, opposite seventh pole west of milepole 27 of railroad, 12 meters south of track, 1 meter above base of rail; red metal cap on iron post (U. S. C. & G. S. b. m. V_5)	4,734.699
Barnwell, 22 meters west of Menvel Hotel entrance, 12 meters east of east corner of railroad freight-house platform, 19 meters southeast of railroad track, level with base of rail; bottom of hole cut in cement or stone post (U. S. C. & G. S. b. m. W_5)	4,807.881
Barnwell, about 2 miles north of, 7½ poles northwest of milepole 31 of rairoad, 14 meters southwest of track, 2 meters below base of rail; red metal cap on iron post (U. S. C. & G. S. b. m. X_5)	4,572.392
Vanderbilt, 4 poles west of milepole 34 of railroad, 15 meters north of track, 0.5 meter below base of rail; bottom of hole cut in top of cement or stone post (U. S. C. & G. S. b. m. Y_5)	4,153.673
Vanderbilt, about 1.9 miles northwest of, about 0.1 mile north of tin mile marker 36, 22 meters northeast of the track, 0.5 meter above base of rail; red metal cap on iron post (U. S. C. & G. S. b. m. Z_5)	3,882.194
Ivanpah (formerly Leastalk), 3 meters west of thirteenth pole west of milepole 268, in north angle of intersection of Atchison, Topeka & Santa Fe Ry. and Los Angeles & Salt Lake R. R., 7 meters northwest of former road and 8 meters northeast of latter road, 1.5 meters below base of rail; bottom of hole cut in top of cement or stone post (U. S. C. & G. S. b. m. A_6)	3,508.880
Ivanpah (formerly Leastalk), about 2.3 miles north of, 6 meters west of fourth pole southwest of milepole 270, 15 meters northwest of Los Angeles & Salt Lake R. R. track, 1 meter below base of rail; red metal cap on iron post (U. S. C. & G. S. b. m. B_6)	3,101.749
Moore, 4 meters northwest of second pole northeast of milepole 272, 14 meters west of Los Angeles & Salt Lake R. R. track, opposite signboard, set in gravel, 3 meters below base of rail; bottom of hole in top of cement or stone post (U. S. C. & G. S. b. m. C_6)	3,283.963
Nipton, about 2.4 miles southeast of, 4 meters northwest of third pole north of milepole 275, 15 meters west of railroad track, 3 meters below base of rail; stone post (U. S. C. & G. S. b. m. E_6)	3,025.057
Nipton, about 2.5 miles northwest of, 1½ poles southeast of milepole 280, 21 meters southwest of railroad track, 1½ meters below base of rail; red metal cap on iron post (U. S. C. & G. S. b. m. F_6)	2,915.781
Lyons, 10½ poles northwest of milepole 282, 29 meters east of signboard, 15 meters northeast of railroad track, 1.5 meters below base of rail; bottom of hole in top of cement or stone post (U. S. C. & G. S. b. m. G_6)	2,803.856

Feet

Calada, opposite sixth pole northwest of milepole 287, 46 meters southwest of signboard on railroad, 25 meters southeast of boundary post between San Bernardino County, Calif., and Clark County, Nev., 15 meters northeast of track, 1 meter below base of rail; bottom of hole in top of cement or stone post (U. S. C. & G. S b. m. H_6) ---------- 2,745.303

Primary leveling by L. F. Biggs in 1909

From State line 11.6 miles east of Barnwell west along Atchison, Topeka & Santa Fe Ry. to Barnwell (part of circuit from Las Vegas, Nev.)

Barnwell, 10 miles east of, in base of milepost 10; spike with aluminum tag stamped "4381" ---------- 4,378.36
Barnwell, 9 miles east of, in base of milepost 9; spike with aluminum tag stamped "4502" ---------- 4,499.59
Barnwell, 8.5 miles east of, 50 feet north of railroad, 150 feet east of milepost; iron post stamped "4643 B 1909 18" ---------- 4,640.309
Hitt, 200 feet east of station, in base of telephone pole; spike with aluminum tag stamped "4611" ---------- 4,608.97
Barnwell, 5 miles east of, in base of milepost 5; spike with aluminum tag stamped "4599" ---------- 4,596.61
Barnwell, 4 miles east of, 50 feet north of railroad, 100 feet west of milepost 4; iron post stamped "4578 B 1909 19" ---------- 4,576.179
Barnwell, 3 miles east of, in base of milepost 3; spike with aluminum tag stamped "4543" ---------- 4,540.79
Barnwell, 2 miles east of, in base of first telephone pole east of milepost 2; spike with aluminum tag stamped "4610" ---------- 4,608.39
Barnwell, 1 mile east of, in base of milepost 1; spike with aluminum tag stamped "4702" ---------- 4,700.44
Barnwell, San Bernardino County, 72 feet east of Menvel Hotel, 39.36 feet east of east corner of Atchison, Topeka & Santa Fe Ry. freight-house platform, 62.32 feet southeast of railroad track, on level with base of rail; square hole in top of stone post, set in sandy soil and dry clay, lettered "U. S. B. M." ---------- 4,807.881

From Barnwell southwest along road to Government Holes, thence northwest to Cima, thence west to point 12 miles southeast of Silver Lake (portion of circuit via Silver Lake and Riggs, Calif., to Stump Springs, Nev., in which an excessive error has been adjusted)

Barnwell, 1.1 miles southwest of, west edge of road, in base of yucca tree; spike with aluminum tag stamped "4910" ---------- 4,910.51
Barnwell, 2.3 miles southwest of, east edge of road, in base of yucca tree; spike with aluminum tag stamped "5046" ---------- 5,045.65
Barnwell, 4 miles southwest of, 500 feet south of wash, on first slope of ridge, 50 feet north of road, east of New York Mountain triangulation station; iron post stamped "4957 B 1909 20" ---------- 4,956.552
Barnwell, 4.7 miles southwest of, east edge of road, east bank of wash, in yucca tree; spike with aluminum tag stamped "4807" ---------- 4,807.14
Barnwell, 6 miles southwest of, south edge of road, in base of yucca tree; spike with aluminum tag stamped "4871" ---------- 4,870.81
Barnwell, 7.3 miles southwest of, 300 feet south of junction of road to Youngs Camp, 50 feet west of road, on small knoll; iron post stamped "5119 B 1909 21" ---------- 5,118.186

	Feet
Forks of road to Youngs Camp, 1.2 miles south of, 20 feet north of road, on summit between Government Holes and Barnwell, in base of yucca tree; spike with aluminum tag stamped "5200"	5,199.88
Forks of road to Youngs Camp, 2 miles southwest of, south edge of road on ridge between two washes, in base of yucca tree; spike with aluminum tag stamped "5109"	5,109.30
Government Holes, 4.7 miles northeast of, 60 feet north of road, in one of pile of granite boulders; aluminum tablet stamped "5027 B 1909 22"	5,027.086
Government Holes, 3.3 miles northeast of, on point of ridge at junction of three washes, in stump; copper nail with aluminum tag stamped "4914"	4,913.93
Government Holes, 2.1 miles east of, at junction of road to Rock Springs, 1,000 feet north of spring, on boulder painted "4776"; chisel point	4,776.18
Government Holes, 1.1 miles northeast of, 50 feet north of road, on large boulder painted "4922"; chisel point	4,922.25
Government Holes, 1,000 feet northeast of house, 150 feet north of road, west edge of long granite boulder; aluminum tablet stamped "5019 B 1909 23"	5,018.355
Government Holes, 1.9 miles northwest of, 60 feet north of road, on large flat at summit; iron post stamped "5167 B 1909 24"	5,166.517
Government Holes, 4.3 miles northwest of, north edge of road, at rocky point, on boulder painted "4854"; chisel point	4,853.58
Government Holes, 5.1 miles northwest of, north edge of road, large boulder painted "4705"; chisel point	4,704.33
Cima, 7.6 miles southeast of, 0.5 mile east of junction of old Government road to San Bernardino where road leaves Cedar Canyon, north edge of canyon, 50 feet west of road; iron post stamped "4625 B 1909 25"	4,624.917
Cima, 7 miles southeast of, at junction of old Government road, on boulder painted "4480"; chisel point	4,480.08
Cima, 5.9 miles southeast of, west edge of road, in base of yucca tree; spike with aluminum tag stamped "4330"	4,329.69
Cima, 4.8 miles southeast of, 1.7 miles south of Death Valley mine, east edge of road, at base of round butte, in base of yucca tree; spike with aluminum tag stamped "4340"	4,339.84
Cima, 3.1 miles southeast of, 1,000 feet west of main building at Death Valley mine, 30 feet west of road; iron post stamped "4370 B 1909 26"	4,369.643
Cima, 1.7 miles southeast of, west edge of road, 200 feet west of telephone line, in base of yucca tree; spike with aluminum tag stamped "4282"	4,283.08
Cima, in front of Los Angeles & Salt Lake R. R. station; top of rail	4,188.5
Cima, 800 feet south of station, 2.5 telegraph poles south of milepost 254, west edge of right of way; iron post stamped "4204 B 1909 27"	4,203.623
Cima, 1.3 miles west of, south edge of road, in base of yucca tree; spike with aluminum tag stamped "4201"	4,200.85
Cima, 2.3 miles west of, south edge of road, in crotch of yucca tree; nail with aluminum tag stamped "4173"	4,182.44
Cima, 3.4 miles west of, 40 feet north of road; iron post stamped "4116 B 1909 28"	4,106.075

	Feet
Cima, 4.7 miles west of, 50 feet south of road, in base of yucca tree; spike with aluminum tag stamped "4051"	4,050.13
Cima, 6.1 miles west of, 50 feet north of junction of old Government road to San Bernardino and road to Cima; iron post stamped "3932 B 1909 29"	3,931.744
Cima, 7.2 miles west of, 1.2 miles west of forks of road, south edge of road at rock point, on boulder painted "3817"; chisel point	3,817.97
Marl Spring, 1,000 feet northeast of, 50 feet north of road, on summit of ridge; iron post stamped "3904 B 1909 30"	3,903.752
Marl Spring, 1.8 miles northwest of, east edge of road, on summit of pass; iron post stamped "4556 B 1909 31"	4,555.877
Marl Spring, 3.7 miles west of, north edge of road, on boulder painted "4079"; chisel point	4,098.50
Marl Spring, 4.7 miles west of, north edge of road, in top of stake; nail with aluminum tag stamped "3788"	3,807.38
Marl Spring, 5.8 miles west of, 1,000 feet west of place where road passes over hard formation, 500 feet west of large mesquite tree, 15 feet east of road; iron post stamped "3535 B 1909 32"	3,554.499
Marl Spring, 10.4 miles west of, south edge of wash, 100 feet south of large lava boulder, 1 mile east of long black point, opposite middle one of three round buttes; iron post stamped "2762 B 1909 33"	2,761.566
Marl Suring, 11.4 miles west of, south edge of road, on boulder painted "2602"; chisel point	2,600.77
17-Mile Point, 1.9 miles east of, at narrowest part of wash, south side of road, on boulder painted "2213"; chisel point	2,212.34
17-Mile Point, 1 mile east of, 900 feet east of crossroad, south edge of wash, 100 feet west of two large boulders in wash, in bedrock; aluminum tablet stamped "2106 B 1909 34"	2,105.069
17-Mile Point, 200 feet east of signboard, on extreme north point of granite boulder painted "1965"; chisel point	1,964.02
17-Mile Point, 1 mile northwest of, north edge of road, on boulder painted "1837"; chisel point	1,836.06
17-Mile Point, 4.6 miles northwest of, 12.2 miles southeast of Silver Lake, 30 feet north of road, at large flat; iron post stamped "1532 B 1909 35"	1,531.518

From Kingston Spring northeast along road to Culver's ranch near State line (part of circuit from Barnwell in which an excessive error has been adjusted)

Kingston Spring, midway between spring and cabin; iron post stamped "2271 B 1909 45"	2,267.390
Kingston Spring, 3.3 miles northeast of, 50 feet south of road, 25 feet south of mesquite tree, on boulder painted "2349"; chisel point	2,347.16
Kingston Spring, 5 miles northeast of, 200 feet north of junction of road to north, west end of small ridge; iron post stamped "2514 B 1909 46"	2,512.210
Kingston Spring, 6.7 miles northeast of, south edge of wash, 2,000 feet west of place where road leaves main wash, on black rocky point, in ledge; aluminum tablet stamped "2647 B 1909 47"	2,645.148
Kingston Spring, 10.3 miles northeast of, west edge of road, on boulder painted "3173"; chisel point	3,171.53
Kingston Spring, 11.3 miles northeast of, 25 feet west of road where road leaves wash, 2 miles south of summit of pass; iron post stamped "3320 B 1909 48"	3,318.011

	Feet
Kingston Spring, 13.5 miles northeast of, on summit of pass between Kingston Spring and Sandy, 15 feet east of road; iron post stamped "3585 B 1909 49"	3,582.710
Sandy 10.3 miles west of, in forks of road to Horse Springs; iron post stamped "3145 B 1909 50"	3,143.097
Sandy, 9 miles west of, west edge of road, 0.5 mile south of point of long ridge, on boulder painted "2978"; chisel point	2,976.67
Sandy, 5 miles west of, 0.5 mile north of Haverstick ranch, at junction of Sandy and Horse Springs roads; iron post stamped "2616 B 1909 51"	2,613.762
Haverstick ranch, 2.3 miles north of, in base of windmill tower; spike with aluminum tag stamped "2645"	2,642.97

DEGREE QUADRANGLE 35°–36°, 116°–117°

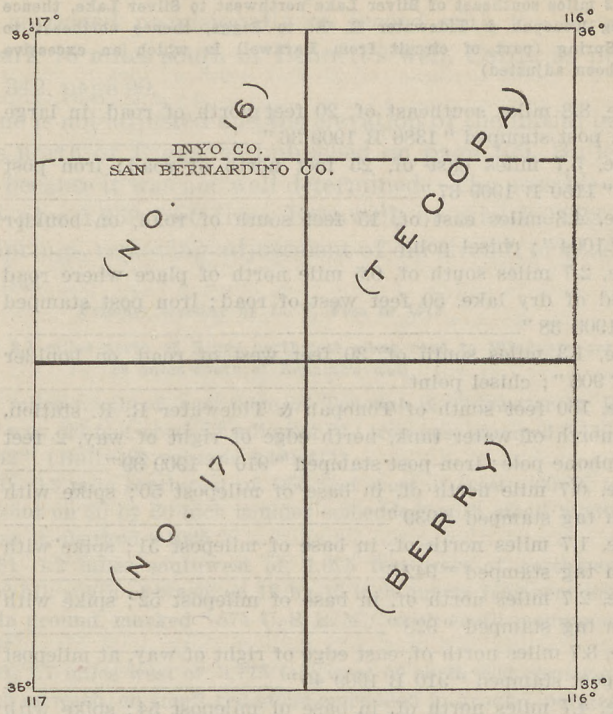


FIGURE 19.—Diagram of degree quadrangle 35°–36°, 116°–117°

INYO AND SAN BERNARDINO COUNTIES

Primary leveling by L. F. Biggs in 1907

From point near Windgate Pass northeasterly to Furnace Creek quadrangle

	Feet
Windgate Pass, 6.3 miles east of, 50 feet east of road, on large boulder; tablet stamped "B 1863 1907"	1,862.436
Windgate Pass, 9.6 miles east of, 20 feet east of road; iron post stamped "B 1730 1907"	1,729.427
Windgate Pass, 13.3 miles northeast of, 30 feet east of road; iron post stamped "B 1610 1907"	1,608.343
Windgate Pass, 15.5 miles northeast of, 20 feet east of road; iron post stamped "B 1907 1278"	1,277.089
Windgate Pass, 17.5 miles northeast of, 10 feet east of road, boulder; tablet stamped "B 1907 930"	928.463
Windgate Pass, 21.1 miles north of, 200 feet north of road, large boulder; aluminum tablet stamped "B 1907 480"	478.282
Bennett's well, 16 miles south of, 20 feet east of road; iron post stamped "B 1907 —215"	[1]—216.156

[1] Elevations having the minus sign are below sea level.

	Feet
Bennett's well, 13.1 miles south of, 20 feet east of road; iron post stamped "B 1907 —224"	[2]—225.691
Bennett's well, 10 miles south of, 20 feet east of road; iron post stamped "B 1907 —235"	—236.118

Primary leveling by L. F. Biggs in 1909

From point 12 miles southeast of Silver Lake northwest to Silver Lake, thence north along Tonopah & Tidewater R. R. to Riggs, thence northeast to Kingston Spring (part of circuit from Barnwell in which an excessive error has been adjusted)

Silver Lake, 8.8 miles southeast of, 20 feet north of road, in large flat; iron post stamped "1386 B 1909 36"	1,385.050
Silver Lake, 5.7 miles east of, 25 feet north of road; iron post stamped "1150 B 1909 37"	1,148.552
Silver Lake, 4.3 miles east of, 15 feet south of road, on boulder painted "1004"; chisel point	1,002.45
Silver Lake, 2.7 miles south of, 0.5 mile north of place where road enters bed of dry lake, 50 feet west of road; iron post stamped "908 B 1909 38"	907.209
Silver Lake, 1.3 miles south of, 30 feet west of road, on boulder painted "908"; chisel point	905.79
Silver Lake, 150 feet south of Tonopah & Tidewater R. R. station, 100 feet north of water tank, north edge of right of way, 2 feet from telephone pole; iron post stamped "910 B 1909 39"	909.092
Silver Lake, 0.7 mile north of, in base of milepost 50; spike with aluminum tag stamped "939"	938.33
Silver Lake, 1.7 miles north of, in base of milepost 51; spike with aluminum tag stamped "942"	941.28
Silver Lake, 2.7 miles north of, in base of milepost 52; spike with aluminum tag stamped "923"	926.48
Silver Lake, 3.7 miles north of, east edge of right of way, at milepost 53; iron post stamped "910 B 1909 40"	908.791
Silver Lake, 4.7 miles north of, in base of milepost 54; spike with aluminum tag stamped "964"	962.97
Silver Lake, 5.7 miles north of, in base of milepost 55; spike with aluminum tag stamped "969"	968.16
Silver Lake, 6.7 miles north of, in base of milepost 56; spike with aluminum tag stamped "985"	984.37
Silver Lake, 7.7 miles north of, 2 feet from seventh telephone pole south of milepost 57, east edge of railroad right of way; iron post stamped "981 B 1909 41"	979.858
Riggs, 0.8 mile south of, in base of milepost 58; spike with aluminum tag stamped "970"	968.58
Riggs, in front of station; top of rail	969.3
Riggs, 1.3 miles north of, in base of milepost 60; spike with aluminum tag stamped "1035"	1,034.07
Riggs, 2.1 miles north of, north edge of railroad right of way, 20 feet north of milepost 61; iron post stamped "1103 B 1909 42"	1,101.411
Riggs, 3.2 miles north of, in base of milepost 62; spike with aluminum tag stamped "1080"	1,078.52
Milepost 63, Tonopah & Tidewater R. R. 1.2 miles northeast of, 8 miles west of Kingston Spring, 25 feet north of road; iron post stamped "1410 B 1909 43"	1,408.641

[2] Elevations having the minus sign are below sea level.

	Feet
Kingston Spring, 3.5 miles west of, 30 feet south of road, at small bare flat; iron post stamped "1926 B 1909 44"	1,925.122
Kingston Spring, 1 mile west of, north edge of wash, on black rocky point, on boulder painted "2091"; chisel point	2,089.36

The elevations in the following list were determined by primary leveling corrected provisionally to accord with the elevation of a bench mark 16 miles south of Bennett's well, Calif., as published in Bulletin 342, page 90.

The line is not adjusted and the elevation of the initial bench mark, 2.1 miles north of Riggs, as published on page 109, Bulletin 481, is not used because it was not well determined. The possible corrections to it are plus 1.259 feet from Barnwell, or minus 0.828 foot from Stump Springs, removing adjustment of old circuit, or plus 0.817 foot by this line.

Primary leveling by L. V. Fees in 1913

From point 2.1 miles north of Riggs northwest along road to Windgate road 16 miles south of Bennett's well

	Feet
Riggs, 2.1 miles north of, east edge of Tonopah & Tidewater R. R. right of way, 20 feet north of milepost 61; iron post stamped "1103 B 1909 42" (Bull. 481 value is 1,101.411)	1,101.228
Milepost 61, 0.3 mile southwest of, 950 feet west of trestle 60–B, in wash; point on 20 by 30 inch boulder embedded, with small monument near it, marked "1035"	1,034.80
Milepost 61, 1.2 miles southwest of, 1,025 feet west of northwest corner of hill south of wash, on 12 by 15 inch quartz fragment embedded in ground, marked "871 U. S. B. M.," with small monument beside it	871.10
Milepost 61, 1.7 miles west of, 3,775 feet west of northwest corner of hill south of wash, on small red stone embedded in ground, painted "780" and with monument beside it	780.20
Milepost 61, 2.6 miles west of; on top of small stone embedded in ground beside small monument, painted "694 U. S. B. M."	694.23
Milepost 61, 4.3 miles west of, 100 feet west of Silver Lake-Death Valley road, 650 feet west of dry lake; iron post stamped "677 TT 61" and marked by a monument 2½ feet high	676.921
Milepost 61, 4.3 miles west by 1 mile north of, 10 feet west of Silver Lake-Death Valley road; on small red stone embedded in ground near pile of bones, painted "673" on separate stone in pile of bones	672.91
Milepost 61, 4.3 miles west by 1.1 miles north of, 12 feet west of Silver Lake-Death Valley road; on 15 by 15 inch boulder embedded in ground, painted "674 U. S. B. M." on stone near boulder	673.50
Milepost 61, 4.3 miles west by 2.1 miles northwest of, 35 feet west of Silver Lake-Death Valley road; iron post stamped "675 TT 61"	675.274
Milepost 61, 4.3 miles west by 3.25 miles northwest of, 7 feet east of Silver Lake-Death Valley road; on small stone embedded in ground near monument, painted "659"	658.93
Milepost 61, 4.3 miles west by 4.2 miles northwest of, 10 feet west of Silver Lake-Death Valley road; on stone embedded in ground and painted "636"	635.85

	Feet
Milepost 61, 4.3 miles west by 4.9 miles northwest of, 28 feet east of Silver Lake-Death Valley road; iron post stamped "629 TT 61"	628.547
Milepost 61, 4.3 miles west by 5.4 miles northwest of, 6 feet west of Silver Lake-Death Valley road, on top of stone near small monument, painted "607 U. S. B. M."	606.48
Salt Springs, 2.4 miles southeast of, 15 feet east of Silver Lake-Saratoga Springs road; on black stone embedded in ground and marked by small cairn, painted "583"	582.88
Salt Springs, 2 miles southeast of, 20 feet south of fork in Silver Lake-Saratoga Springs road, 4.3 miles west by 6.5 miles northwest of milepost 61; iron post stamped "575 TT 61"	574.618
Salt Springs, 0.7 mile east of, 20 feet south of Silver Lake-Saratoga Springs road, 330 feet west of forks of road to old Amargosa Mine; top of 7 by 10 inch boulder set in ground and painted "550 U. S. B. M."	550.28
Salt Springs, in middle of Silver Lake-Saratoga Springs road, at surface of water in middle of drain from Silurian Lake, December 27, 1912 (The Mohave Channel here breaks through a rocky ridge)	500.78
Salt Springs, 1,400 feet northwest of, 25 feet south of Silver Lake-Saratoga Springs road, on top of 2 by 2 foot boulder embedded in channel from Silurian Lake, painted on small cairn "486"	485.83
Salt Springs, 0.7 mile northwest of, 40 feet southwest of Silver Lake-Saratoga Springs road, 225 feet west of point where this road leaves channel; on top of 12 by 18 inch boulder embedded in ground, marked on white stone standing near it "U. S. B. M. 478"	477.57
Salt Springs, 1.2 miles west of, 30 feet south of Silver Lake-Saratoga Springs road, 8 feet south of 5-foot cairn; iron post stamped "455 TT 61"	455.248
Salt Springs, 2.3 miles west of, 20 feet south of Silver Lake-Saratoga Springs road, on top of 6 by 12 inch stone embedded in ground, marked "U. S. B. M. 410" on small cairn near it	409.48
Salt Springs, 2.6 miles west of, 50 feet east by 12 feet south of Sheep Creek fork of Silver Lake-Saratoga Springs road, painted "397 on small stone embedded in ground with small cairn near it"	396.66
Salt Springs, 3.8 miles west of, 5 feet south of Silver Lake-Saratoga Springs road, near 6-foot cairn; iron post stamped "356 TT 61"	355.855
Salt Springs, 4.4 miles west of, 30 feet south of south water course of Amargosa River; on 14-inch boulder embedded in ground, painted "322 U. S. B. M."	321.56
Salt Springs, 5.2 miles west of, middle of north end of hill, where Amargosa River cuts off end of ridge, at south bank of river, 2 feet above its bed, corner of hard slate ledge; painted "301 U. S. B. M."	300.95
Salt Springs, 5.2 miles west of, middle of north end of hill, where Amargosa River cuts off end of ridge, south bank of river, 6 feet above its bed, in hard slate ledge; aluminum tablet stamped "305 TT 61"	304.754
Saratoga Springs, 3.9 miles east of, southwest corner of north hill where Amargosa River cuts off south end of ridge; painted turning point and "296" on small stone embedded in ground	295.97
Saratoga Springs, 3.1 miles east of, 20 feet north of Silver Lake-Saratoga Springs road; on small stone embedded in ground near small cairn, marked "275"	274.42

	Feet
Saratoga Springs, 1.9 miles east of, 2 feet south of Saratoga Springs-Silver Lake road; on small stone embedded in ground, near small cairn marked "240"	239.56
Saratoga Springs, 0.6 mile southeast of, 5 feet east of Silver Lake-Saratoga Springs road, on end of black ledge where road turns around end of isolated hill about 40 feet high; painted "224 U. S. B. M."	224.22
Saratoga Springs, 600 feet east of cabin, 50 feet north of Silver Lake-Saratoga Springs road; chiseled cross and "214 U. S. B. M." on 3-foot by 2-foot stone	214.14
Saratoga Springs, 600 feet east of cabin, 50 feet north of Silver Lake-Saratoga Springs road, in 3-foot rock fragment at foot of hill; aluminum tablet stamped "215 TT 61"	215.188
Saratoga Springs, 1.1 miles west of, 50 feet north of Saratoga Springs-Death Valley road; knife blade driven in southwest root of lone mesquite tree, tin U. S. G. S. b. m. witness mark tacked to blaze and stamped "183"	182.71
Saratoga Springs, 2.4 miles west of, 2 feet west of Saratoga Springs-Death Valley road, 1,160 feet south of Randsburg-Owl Springs fork; on small stone embedded in ground near small cairn, painted "230"	229.92
Saratoga Springs, 2.6 miles west of, at Randsburg-Owl Springs fork of Saratoga Springs-Death Valley road; iron post stamped "228 TT 61"	227.929
Saratoga Springs, 2.6 miles west by 1 mile north of, 6 feet west of Saratoga Springs-Death Valley road; on stone embedded in ground near small monument, painted "205"	205.07
Saratoga Springs, 2.6 miles west by 1.9 miles north of, 10 feet east of Saratoga Springs-Death Valley road; on small stone embedded in ground near small monument, painted "193 U. S. B. M."	192.44
Saratoga Springs, 2.6 miles west by 2.7 miles north of, 46 feet west of Saratoga Springs-Death Valley road, just south of point where the road turns west in wash between two hills; iron post stamped "180 TT 61"	179.815
Saratoga Springs, 2.6 miles west by 3.4 miles north of, 100 feet west of base of hill and Saratoga Springs-Death Valley road, on small stone embedded in ground near small cairn, painted "204 U. S. B. M."	203.32
Saratoga Springs, 2.6 miles west by 4.6 miles north of, 20 feet west of wash and Saratoga Springs-Death Valley road; on white stone embedded in ground near small cairn, painted "177 U. S. B. M."	177.23
Saratoga Springs, 2.6 miles west by 5.3 miles north of, 20 feet west of Saratoga Springs-Death Valley road; iron post stamped "154 TT 61"	153.304
Saratoga Springs, 2.6 miles west by 6.5 miles north of, 8 feet west of Saratoga Springs-Death Valley road; painted point on small stone near stone marked "150 U. S. B. M."	149.41
Confidence Mill, 6.5 miles south of, 20 feet east of Saratoga Springs-Death Valley road; point on stone embedded in ground and marked "153"	152.97

	Feet
Confidence Mill, 5.7 miles south of, 40 feet east of Saratoga Springs-Death Valley road, opposite black cairn 2 feet high, in 4-foot boulder embedded in ground; bronze tablet stamped "82 TT 61"	81.972
Confidence Mill, 5 miles south of, 25 feet west of Saratoga Springs-Death Valley road; on small stone embedded in ground, marked "29"	29.20
Confidence Mill, 3.9 miles south of, 15 feet west of Saratoga Springs-Death Valley road; iron post stamped "14 TT 61"	14.065
Confidence Mill, 2.6 miles south of, 20 feet east of Saratoga Springs-Death Valley road; point on small stone set in ground near stone, marked "—3 U. S. B. M."	[3]—3.61
Confidence Mill, 1.3 miles south of, 12 feet west of Saratoga Springs-Death Valley road; on 1¼ inch iron pipe driven into ground near stone, painted "—13"	—12.77
Confidence Mill, 300 feet south of, 3 feet south of Saratoga Springs signboard on west side of Saratoga Springs-Death Valley road; iron post stamped "—17 TT 61"	—17.359
Confidence Mill, 0.9 mile north of, 1 foot east of Confidence Mill-Death Valley road; chisel mark on red rock embedded in ground near small monument, painted "—24 U. S. B. M."	—23.76
Confidence Mill, 1.4 miles north of, 10 feet east of Confidence Mill-Death Valley road, 4 feet west of 3-foot cairn; iron post stamped "—25 TT 61"	—24.712
Confidence Mill, 1.9 miles north of, 4 feet east of Confidence Mill-Death Valley road, 60 feet south of large clump of sage; chisel mark on top of 1-foot black boulder embedded in ground near small monument, painted "—29"	—29.22
Confidence Mill, 3 miles north of, 30 feet west of, road opposite opening in hill on east side of road; top of black stone embedded in ground near small cairn, painted "—42 U. S. B. M."	—42.32
Confidence Mill, 4.1 miles north of, 75 feet west of Confidence Mill-Death Valley road, 75 feet west of main wash of Amargosa River; point on black stone embedded in ground near small monument, stone painted "—58"	—57.98
Confidence Mill, 4.4 miles north of, 15 feet west of Confidence Mill-Death Valley road, 6 feet north of 2-foot mound; iron post stamped "—54 TT 61"	—53.855
Confidence Mill, 5.2 miles north of, 4 feet west of Confidence Mill-Death Valley road, on small stone embedded in ground near small cairn, stone painted "—67" and cairn painted "U. S. B. M."	—67.27
Confidence Mill, 6.5 miles north of, 6 feet east of Confidence Mill-Death Valley road, 500 feet north of group of large boulders on west bank of Amargosa River, 30 feet west of main wash of Amargosa; on 3-foot boulder, painted "—98 U. S. B. M."	—98.54
Confidence Mill, 7.1 miles north of, 20 feet east of Confidence Mill-Death Valley road, 750 feet north of junction of road to Tecopa; in 4-foot black boulder embedded in ground near 4-foot cairn; aluminum tablet stamped "—107 TT 61"	—107.535
Confidence Mill, 8.4 miles north of, 20 feet east of Confidence Mill-Death Valley road, 50 feet east of main wash of Amargosa River; painted ring on top of 10-inch black boulder embedded in ground near small cairn painted "—141 U. S. B. M."	—140.85

[3] Elevations having the minus sign are below sea level.

	Feet
Confidence Mill, 9.6 miles north of, 40 feet east of main wash of Amargosa River, on Confidence Mill-Death Valley road (here scattered and poorly defined), on small black boulder embedded in ground near small cairn, painted "—165"	[4]—165.45
Confidence Mill, 10.6 miles north of, 300 feet west of main wash of Amargosa River, 700 feet east of west hill, opposite a 30-foot black hill which lies about 300 feet east of main wash of Amargosa River, in mouth of Silver Lake branch of Death Valley (the road is poorly defined); iron post stamped "—183 TT 61"	—183.448
Confidence Mill, 11.9 miles north of, 2 feet east of Confidence Mill-Death Valley road, painted turning point on black rock embedded in ground near small cairn, painted "—200 U. S. B. M."	—199.94
Confidence Mill, 13.3 miles north of, 1 foot west of Confidence Mill-Death Valley road, on top of black rock embedded in ground near small cairn, painted "—213 U. S. B. M." (this bench mark is 0.7 mile south of an old obliterated signboard with tin can wired to its base)	—213.48
Confidence Mill, 14.9 miles north of, 1,300 feet west of Confidence Mill-Death Valley road, 20 feet east of Bennett's well-Windgate Pass road, 200 feet north of 4½-foot cairn; iron post stamped "—215 B 63"	—216.156

[4] Elevations having the minus sign are below sea level.

DEGREE QUADRANGLE 35°–36°, 117°–118°

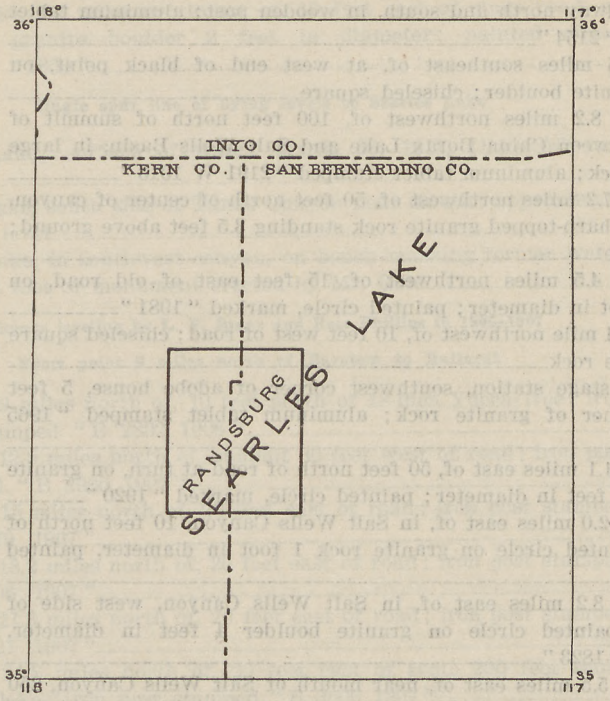


FIGURE 20.—Diagram of degree quadrangle 35°–36°, 117°–118°

SEARLES LAKE QUADRANGLE

[Latitude 35°–36°; longitude 117°–118°]

INYO, KERN, AND SAN BERNARDINO COUNTIES

Primary leveling by C. W. Wardle in 1913

From Brown southeast along highway to point 5.5 miles northeast of Indian Wells

	Feet
Indian Wells, 5.9 miles north of, 30 feet west of road; iron post stamped "B"	2,598.215
Brown, 30 feet east of railroad, in front of railroad eating house; iron post stamped "2395"	2,394.174
Brown, 1.3 miles south of, in base of milepost 455; spike	2,345.80
Brown, 2.1 miles south of, in base of milepost 454; spike	2,323.10
Brown, 3.1 miles south of, in base of milepost 453; spike	2,301.17
Indian Wells, 5.5 miles northeast of, 30 feet east of road, in an alkali flat; iron post stamped "2236 B"	2,240.278

From point 5.2 miles southwest of Desert Wells southeast along road to point 8.9 miles north of Granite Wells

	Feet
Desert Wells, 5.2 miles southwest of, 50 feet east of road; iron post stamped "2225 B"	2,229.066
Brown, 12.6 miles southeast of, in an alkali flat, in wooden post; aluminum tablet stamped "2184"	2,182.662
Brown, 16.7 miles southeast of, west edge of China Borax Lake, about midway north and south, in wooden post; aluminum tablet stamped "2154"	2,152.949
Brown, 19.5 miles southeast of, at west end of black point, on 5-foot granite boulder; chiseled square	2,174.21
Salt Wells, 8.2 miles northwest of, 100 feet north of summit of divide between China Borax Lake and Salt Wells Basin, in large granite rock; aluminum tablet stamped "2191 W 1913"	2,190.357
Salt Wells, 7.2 miles northwest of, 50 feet north of center of canyon, on large sharp-topped granite rock standing 3.5 feet above ground; cut square	2,097.28
Salt Wells, 4.5 miles northwest of, 15 feet east of old road, on rock 1 foot in diameter; painted circle, marked "1981"	1,980.59
Salt Wells, 1 mile northwest of, 10 feet west of road; chiseled square on granite rock	1,969.00
Salt Wells stage station, southwest corner of adobe house, 5 feet from corner of granite rock; aluminum tablet stamped "1965 W 1913"	1,964.209
Salt Wells, 1.1 miles east of, 50 feet north of road at turn, on granite boulder 3 feet in diameter; painted circle, marked "1920"	1,919.00
Salt Wells, 2.0 miles east of, in Salt Wells Canyon, 10 feet north of road; painted circle on granite rock 1 foot in diameter, painted "1891"	1,890.62
Salt Wells, 3.2 miles east of, in Salt Wells Canyon, west side of canyon, painted circle on granite boulder 4 feet in diameter, marked "1823"	1,821.73
Salt Wells, 5.5 miles east of, near mouth of Salt Wells Canyon, 250 feet west of road at base of granite butte; aluminum tablet stamped "1701 W 1913"	1,700.450
Salt Wells, 10.4 miles east of, at forks of road, 50 feet south of road, on top of location monument; painted circle	1,641.00
Granite Wells, 11.8 miles northwest of, center of dry basin, at top of divide between Searles Lake Basin and Panamint Valley, in granite rock; aluminum tablet stamped "2262 W 1913"	2,261.591
Granite Wells, 8.9 miles north of, 20 feet east of road; iron post stamped "2370 B 1907" (erroneously stamped)	2,269.778

From point 5.5 miles northeast of Salt Wells to soda works and return

Salt Wells, 6.7 miles northeast of, 100 feet north of road forks, on top of granite boulder 2 feet in diameter; painted circle marked "1674"	1,672.82
Soda works, 4.1 miles south of, in Searles Lake, 20 feet west of old road, stake driven in ground; copper nail in top	1,622.84
Soda works, 2.8 miles southwest of, 50 feet west of road, at point of hill, on top of granite boulder 4 feet in diameter; painted circle, marked "1644"	1,642.91
Soda works, 2.2 miles south of, 400 feet northeast of road forks, at point where the stage road enters the lake, on top of granite boulder 2 feet in diameter; painted circle, marked "1640"	1,638.85

	Feet
Soda works, 800 feet southwest of boiler house, 30 feet east of stage road, on granite boulder 3 feet in diameter; painted circle marked "1636"	1,635.15
Soda works, 0.7 mile southeast of, 40 feet north of road, United States mineral monument marked "U. S. L. M. No. 112 S" and 1–4402; in top of granite rock standing 2½ feet above ground; aluminum tablet stamped "1623 W 1913"	1,622.650
Soda works, 5.4 miles southwest of, 10 feet east of stage road, on top of granite boulder 2 feet in diameter; painted circle, marked "1659"	1,657.94

Single spur line of flying levels to Searles Lake

Searles Lake; surface of water, March 26, 1913, (lake 0.6 foot deep)	1,618.08
Searles Lake, south side of Tanks Canyon near mouth; approximate former level	2,261.64
Searles Lake, in southwest canyon, on bench marking former water level, at foot of monument erected by Mr. Gale	2,254.75

Primary leveling by L. F. Biggs and Ress Phillips in 1905–1907

From point 9 miles north of Barstow to Ballarat

Barstow, 9 miles north of, 10 feet north of 18-inch Yucca tree; iron post stamped "B 2892 1906"	2,892.651
Barstow, 12.5 miles north of, summit 30 feet west of road; iron post stamped "B 3960 1907"	3,960.445
Barstow, 15 miles north of, 20 feet east of road; iron post stamped "B 3679 1907"	3,679.546
Barstow, 18.2 miles north of, 20 feet east of road; iron post stamped "B 3306 1907"	3,306.581
Barstow, 21.3 miles north of, 20 feet east of road; iron post stamped "B 3221 1907"	3,220.847
Barstow, 24.8 miles north of, 20 feet east of road, 200 feet south of dry lake; iron post stamped "B 3006 1907"	3,005.702
Copper City, 7.3 miles south of, 20 feet east of road; iron post stamped "B 3035 1907"	3,035.080
Copper City, 3.5 miles south of, 20 feet east of road; iron post stamped "B 3291 1907"	3,290.973
Copper City House, 100 feet east of, iron post stamped "B 4001 1907"	4,000.860
Copper City, 3.2 miles north of, on summit 15 feet west of road; iron post stamped "4402 B 1907"	4,402.217
Granite Wells, junction of roads, large boulder; aluminum tablet stamped "B 3939 1907"	3,939.383
Granite Wells, 2.7 miles north of, 40 feet east of road, sandstone ledge; aluminum tablet stamped "B 3404 1907"	3,403.308
Granite Wells, 6 miles north of, 40 feet east of road, boulder; aluminum tablet stamped "B 2719 1907"	2,718.180
Granite Wells, 8.9 miles north of, 20 feet east of road; iron post stamped "B 2370 1907"	2,269.778
Granite Wells, 12.2 miles north of, 20 feet east of road; iron post stamped "2276 B 1907"	2,175.265
Lone Willow, 10 miles south of, 15.3 miles north of Granite Wells, 20 feet east of road; iron post stamped "B 2203 1907"	2,103.201

	Feet
Lone Willow, 6 miles south of, 20 feet east of road; iron post stamped "2121 B 1907"	2,020.578
Lone Willow, 2.6 miles east of, at junction of road to Lone Willow; iron post stamped "2016 1907 B"	1,914.978
Lone Willow, 2.5 miles north of, 10 feet east of road, large boulder; aluminum tablet stamped "B 1932 1907"	1,831.364
Lone Willow, 5.4 miles north of, 20 feet east of road at junction of road to Ballarat; iron post stamped "B 1786 1907"	1,684.679
Lone Williow, 8.1 miles north of, 200 feet north of large boulder, 30 feet west of road; iron post stamped "B 1907 1632"	1,630.782
Lone Willow, 10.1 miles north of, 10 feet east of road; boulder, tablet stamped "B 1907 1427"	1,426.416
Lone Willow, 12.7 miles north of, 17.1 miles south of Ballarat, 20 feet east of road; iron post stamped "B 1907 1229"	1,228.140
Ballarat, 14 miles south of, 20 feet west of road; iron post stamped "B 1907 1098"	1,097.500
Ballarat, 10.9 miles south of, 20 feet east of road; iron post stamped "B 1907 1059"	1,058.247
Ballarat, 7.6 miles south of, at junction of road, 10 feet east of road; iron post stamped "B 1907 1051"	1,050.237

From point 5.4 miles north of Lone Willow along Ballarat road east to point 3.3 miles east of Windgate Pass

Windgate Pass, at summit, 10 feet east of road, 2.5 miles east of junction of road; iron post stamped "B 1977 1907"	1,975.911
Windgate Pass, 3.3 miles east of, 20 feet north of road; iron post stamped "B 1925 1907"	1,924.041

From Freeman southeasterly to Randsburg, thence easterly to Granite Wells

Freeman, 400 feet south of, 20 feet west of road, on hillside, south side of Walker Canyon; iron post stamped "3379 B"	3,380.504
Freeman, 5 miles east of, 150 feet north of road, on point 300 yards west of wash, 10 feet east of section corner, large boulder; tablet stamped "B 2705 1907"	2,706.001
Freeman, 12.3 miles east of, 30 feet south of road, in ledge; tablet stamped "B 2975 1907"	2,976.402
Willow Spring, at summit of divide south of, 15 feet west of road, 10 feet from granite boulder; iron post stamped "J 4116"	4,109.025
Garden station, 3.3 miles south of, at junction of road to Willow Springs, 300 feet west of road; volcanic boulder; aluminum tablet stamped "B 3512 1907"	3,512.659
Randsburg, 5.1 miles north of, 25 feet northwest of junction of old borax road to Garlock, 20 feet northwest of road; iron post stamped "3010 J"	3,002.258
Randsburg, 1.5 feet west of door of butcher shop (stone building), 1 foot above ground; bronze tablet stamped "3530 J"	3,522.252
Johannesburg, 2.5 feet northwest of platform of station, north side of track; iron post stamped "3544 J"	3,535.865
Johannesburg, 4.4 miles east of, on summit of divide 20 feet west of road; iron post stamped "3326 J"	3,317.433
Tps. 29 and 30 S., Rs. 41 and 42 E., 10 feet southeast of common corner; iron post stamped "2823 J"	2,813.914

Granite Wells, 9 miles southwest of, 30 feet south of Blackwater Well, granite ledge flush with ground; tablet stamped "B 3520 1907" ---------- Feet 3,521.399

Granite Wells, 7.3 miles southwest of, on summit 20 feet north of road, large boulder; tablet stamped "B 3952 1907" ---------- 3,952.611

Granite Wells, 1.5 miles south of, 39.8 miles north of Barstow, 10 feet east of road; point on small boulder painted "3947 U. S. B. M." ---------- 3,946.775

From Freeman northwest to Walkers Pass

Walker Pass, 5 miles southeast of, 50 feet west of road, 200 feet east of spring, granite boulder; aluminum tablet stamped "BB" 4,033.279

From point 6.6 miles north of Mount Vernon Mill southwest to Indian Wells north of Freeman

Mount Vernon Mill, 4 miles north of, 350 west of spring, 20 feet northwest of road, in top of large granite boulder; bronze tablet stamped "5323 B 1905 24" ---------- 5,325.952

Mount Vernon Mill, 1.7 miles north of, 5 feet south of road, 40 feet west of Vurless cabin, in large granite boulder; bronze tablet stamped "4276 B 1905" ---------- 4,278.802

Mount Vernon Mill, 2.25 miles west of, at mouth of Mount Springs Canyon, 20 feet west of road, in large boulder; bronze tablet stamped "3388 B" ---------- 3,391.308

Mount Vernon Mill, 5.8 miles southwest of, 15 feet west of road, in cropping of granite boulder; bronze tablet stamped "2631 B" ---------- 2,635.001

Mount Vernon Mill, 8.8 miles southwest of, 25 feet west of road; iron post stamped "2273 B" ---------- 2,277.160

Desert Well, 1 mile east of, 35 feet north of road, in borax flat, in ledge; bronze tablet stamped "2199 B" ---------- 2,202.975

Desert Well, 2 miles south of, 100 feet east of road, on south side of dry lake; iron post stamped "2209 B" ---------- 2,213.208

Desert Well, 5.2 miles southwest of, 50 feet east of road; iron post stamped "2225 B" ---------- 2,229.166

Indian Wells, 5.5 miles northeast of, 30 feet east of road, in alkali flat; iron post stamped "2236 B" ---------- 2,240.378

Indian Wells, 2.5 miles north of, 15 feet west of road; iron post stamped "2402 B" ---------- 2,406.338

Indian Wells, 300 feet north of, 10 feet west of road; iron post stamped "F 16" ---------- 2,739.018

RANDSBURG QUADRANGLE

[Latitude 35° 15′–35° 30′; longitude 117° 30′–117° 45′]

KERN AND SAN BERNARDINO COUNTIES

From Johannesburg west to Randsburg

Feet

Johannesburg, in front of station; top of rail ---------- 3,536.8

Johannesburg, 2.5 feet northwest of platform of station, north side of track; iron post stamped "3544 J" (recovered by Biggs, 1907) ---- 3,535.865

Randsburg, 1.5 feet west of door of butcher shop (store building), 1 foot above ground; bronze tablet stamped "3530 J" (recovered by Biggs, 1907) ---------- 3,522.252

From Randsburg north to Garden station

	Feet
Randsburg, 5.1 miles north of, 25 feet northwest of junction of old borax road to Garlock, 20 feet northwest of road; iron post stamped "3010 J" (recovered by Biggs, 1907)	3,002.258
Garden station, 1 mile northeast of, sec. 18, T. 28, S., R. 41 E., Mount Diablo meridian, 50 feet northwest of road, 4 feet east of northwest corner of section; iron post stamped "3024 J." (This bench mark is north of Randsburg 15′ quadrangle)	3,015.825

From T. 28 S., R. 40 E., northwest to summit of divide south of Willow Springs

T. 28 S., R. 40 E., sec. 34, 300 feet west of junction of roads, in volcanic boulder; aluminum tablet stamped "3512 B 1907" (set by Biggs, 1907)	3,512.659
Willow Spring, at summit of divide south of, 15 feet west of road, 10 feet from granite boulder; iron post stamped "4116 J" (recovered by Biggs, 1907)	4,109.025

From Garden station south via summit diggings to Johannesburg

Little Dry Lake, summit of divide at south end of, 30 feet east of road; iron post stamped "3220 J"	3,211.690

From Randsburg southeast to Black Hawk mine, thence north to Johannesburg

Black Hawk mine, on ridge 750 feet north of road, 50 feet from junction with road to Stringer; iron post stamped "3706 J"	3,698.211

From Johannesburg east via Skilling Wells road to township corner, thence northeast to southwest corner sec. 29, T. 29 S., R. 42 E.

Johannesburg, 4.4 miles east of, on summit of divide 20 feet west of road; iron post stamped "3326 J" (recovered by Biggs, 1907)	3,317.433
T. 30 S., R. 42 E., 10 feet southeast of northwest corner sec. 6; iron post stamped "2823 J" (recovered by Biggs, 1907)	2,813.914
T. 29 S., R. 42 E., 5 feet northeast of southwest corner sec. 29; iron post stamped "2812" (single spur)	2,802.823

From Johannesburg south along line of Randsburg R. R. (single spur line)

St. Elmo, 50 feet west of switch stand; iron post stamped "3184 J"	3,175.639
St. Elmo, 3.84 miles south of, 30 feet west of track; iron post stamped "2984 J"	2,975.410
Mount Vernon Mill, 9.3 miles north of, 50 feet west of road, in large granite boulder; bronze tablet stamped "5842 B 1905"	5,844.237
Mount Vernon Mill, 6.6 miles north of, 15 feet east of road, near summit, in large granite boulder; bronze tablet stamped "5884 B"	5,886.668

Precise leveling by R. A. Farmer in 1905

North along stage road

Dixie stage station, 2 miles northeast of, 10 feet east of road; iron post stamped "3172 B"	3,173.689
Dixie station, 5.3 miles northeast of, 10 feet west of road; iron post stamped "3290 B"	3,291.562
Freeman, 400 feet south of, 20 feet west of road on hillside south side of Walker Canyon; iron post stamped "3379 B"	3,380.504

Freeman, 3.2 miles northeast of, 30 feet east of road; iron post stamped "3110 B"---------- 3,110.930
Indian Wells, 300 feet north of, 20 feet west of road; iron post stamped "B"---------- 2,739.018
Indian Wells, 3.1 miles north of, 10 feet east of road; iron post stamped "B"---------- 2,697.418
Indian Wells, 5.9 miles north of, 30 feet west of road; iron post---------- 2,598.715
Indian Wells, 9.2 miles north of, 40 feet east of road; iron post---------- 2,485.770
Little Lake, 8.8 miles south of, 40 feet west of road, at summit of granite boulder; aluminum tablet---------- 2,817.365
Little Lake, 1.2 miles south of, 10 feet east of road, summit of black boulder; aluminum tablet---------- 2,946.862
Little Lake, 1.7 miles north of, 50 feet west of road, at summit of granite boulder; aluminum tablet---------- 3,328.541
Little Lake, 4.9 miles north of, 50 feet east of dry lake bed, 40 feet east of road, in summit of lava boulder; aluminum tablet---------- 3,332.519

Precise leveling along the Los Angeles Aqueduct by the Aqueduct Commission in 1907, adjusted by the Geological Survey in 1922

Reaburn's station 1024, on north side of No Name Canyon, on rocky point 350 feet southwest of; brass plug in granite boulder, painted on rock "L.A.A. B.M. No. 44" and marked with red, white, and blue flag---------- 3,384.054
No Name Canyon, 20 feet west of immense boulder cracked vertically, at east end of long granite ledge, on south side of ledge; brass plug in granite boulder, on the ledge is painted "L.A.A. B.M. No. 45" large enough to be seen from bench mark 44, marked with red, white, and blue flag---------- 3,320.925
Sand Canyon, south side of first draw north of, 250 feet southwest of waterfall (dry), 225 feet northwest of Reaburn's station 98.5; brass plug in large granite boulder, painted on rock "L.A.A. B.M. No. 46" and marked with red, white, and blue flag---------- 3,395.421
Sand Canyon, on rocky point on north side of, 300 feet south of Reaburn's station 971; brass plug in granite boulder, painted "L.A.A. B.M. No. 47" and marked with red, white, and blue flag---------- 3,250.785
Sand Canyon, on crest of rocky ridge south side of, 200 feet northwest of Reaburn's station 968; brass plug in rock, painted "L.A.A. B.M. No. 48" and marked with red, white, and blue flag---------- 3,399.586
Sand Canyon, on south side of bottom of first draw south of, 600 feet west of Reaburn's station 950; brass plug in granite boulder, painted "L.A.A. B.M. No. 49" and marked with red, white, and blue flag---------- 3,461.918
Grape Vine Canyon, in saddle in ridge on north side of, near mouth about one-quarter of a mile east of north end of siphon; standard L.A.A. pipe, marked with red, white, and blue flag---------- 3,319.657
Grapevine Canyon, on rocky point on south side, directly south of houses, 900 feet west of Reaburn's station 903, brass plug in large granite slab resting on edge, painted "L.A.A. B.M. No. 51," marked with red, white, and blue flag---------- 3,405.681
Short Canyon, on ridge on north side of, near mouth, 125 feet northeast of Reaburn's station 874; brass plug in granite boulder, painted "L.A.A. B.M. No. 52," marked with red, white, and blue flag--- 3,430.122
Short Canyon, at end of ridge on south side of, opposite mouth, in saddle west of rocky knoll; standard L.A.A. pipe No. 53, marked with red, white, and blue flag---------- 3,427.073

	Feet
Indian Wells Canyon, at north end of rocky ridge near bottom of, 175 feet southwest of Reaburn's station 841; brass plug in granite boulder, painted "L.A.A. B.M. No. 54," marked with red, white, and blue flag	3,337.790
Indian Wells Canyon, south side of, opposite bench mark 54 and 500 feet southwest of Reaburn's station 838; brass plug in granite boulder, painted "L.A.A. B.M. No. 55," marked with red, white, and blue flag	3,441.905
Harmon's L line station 936+18, on ridge 350 feet west of; standard L.A.A. pipe No. 56, marked with red, white, and blue flag	3,412.192
Freeman, 400 feet south of, 20 feet west of road on hillside, south side of Walker Canyon; standard U.S.G.S. pipe No. 57, stamped with "L.A.A. 57" and elevation on side of cap (Bull. 343, p. 10)	3,380.504
Harmon's L line station 607+00, 250 feet west of; standard L.A.A. pipe No. 58, marked with red, white, and blue flag	3,357.971
Harmon's L line station 426+00, 250 feet west of; standard L.A.A. pipe, No. 59, marked with red, white, and blue flag	3,336.493

DEGREE QUADRANGLE 35°–36°, 118°–119°

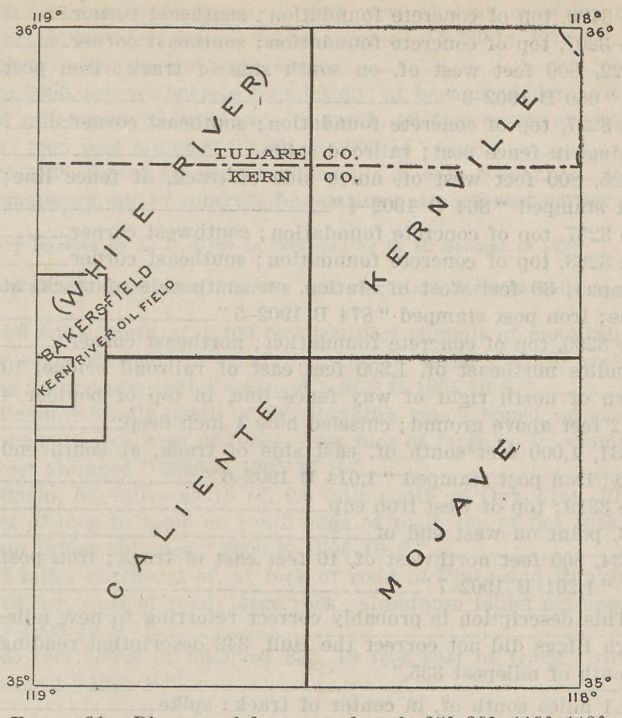


FIGURE 21.—Diagram of degree quadrangle 35°–36°, 118°–119°

CALIENTE QUADRANGLE

[Latitude 35°–35° 30′; longitude 118° 30′–119°]

KERN COUNTY

Precise leveling by C. H. Semper in 1902 and L. F. Biggs in 1914

From Bakersfield (Kern) southeast along Southern Pacific R. R.

	Feet
Bakersfield (Kern), 130 feet north of northwest corner of depot, east edge of highway, near railroad crossing and corner of fence; iron post stamped "421 B 1902"	422.083
Kern Junction tower, 300 feet east of; top of southeast guy bolt on semaphore	417.66
Kern, 2 miles east of, concrete pier over canal; top of northwest corner	424.85
Milepost 316, 800 feet west of, west side of track at edge of highway; iron post stamped "431 B 1902–1"	431.976
Semaphore 3169, top of concrete foundation; southeast corner	433.28

NOTE.—Bench marks on semaphores are the top surface of concrete base for ladder, at foot of ladder. The even-numbered semaphores are on south and west side of track, on right side going toward Los Angeles, odd-numbered on left side.

	Feet
Semaphore 3177, of top of concrete foundation; southwest corner	457.94
Milepost 319, 800 feet west of, on south side of track, at margin of highway; iron post stamped "509–B 1902–2"	510.154
Semaphore 3199, top of concrete foundation; southeast corner	568.40
Semaphore 3207, top of concrete foundation; southeast corner	594.73
Milepost 322, 800 feet west of, on south side of track; iron post stamped "660 B 1902–3"	661.048
Semaphore 3227, top of concrete foundation; southeast corner	724.27
Road crossing, in fence post; railroad spike	800.83
Milepost 325, 800 feet west of, north side of track, at fence line; iron post stamped "864 B 1902–4"	865.017
Semaphore 3257, top of concrete foundation; southwest corner	908.86
Semaphore 3263, top of concrete foundation; southeast corner	862.50
Bena (Pampa), 30 feet west of station, on south side of track, at fence line; iron post stamped "874 B 1902–5"	874.749
Semaphore 3290, top of concrete foundation; northeast corner	931.72
Bena, 2.5 miles northeast of, 1,300 feet east of railroad bridge, 10 feet north of north right of way fence line, in top of boulder 4 by 4 by 2 feet above ground; chiseled hole 1 inch deep	980.908
Milepost 331, 1,000 feet south of, east side of track, at south end of switch; iron post stamped "1,014 B 1902–6"	1,015.334
Semaphore 3319; top of west iron cap	1,058.97
Bridge 333, point on west end of	1,124.41
Milepost 334, 800 feet northwest of, 10 feet east of track; iron post stamped "1,201 B 1902–7"	1,201.861
NOTE.—This description is probably correct referring to new milepost, though Biggs did not correct the Bull. 342 description reading "65 feet south of milepost 335."	
Caliente, 1.1 miles south of, in center of track; spike	1,229.58
Caliente, 1.6 miles south of, 200 feet north of tunnel, north side of track; iron post stamped "1,402 B 1902–8"	1,403.504
Semaphore 3374, at base of; top of box	1,481.20
Semaphore 3387, top of concrete foundation; at foot of ladder	1,594.14
Milepost 340, 800 feet west of, east side of track, at fence line; iron post stamped "1,732 B 1902–9"	1,733.743
Bealville, semaphore; top of concrete foundation	1,808.89
Bealville, 1,900 feet east of, on bluff, west edge of canyon, opposite first tunnel east of Bealville; bronze tablet in boulder stamped "1,845 1914"	1,846.664
Semaphore 3418, top of concrete foundation; at southwest corner	1,944.22
Milepost 343, 700 feet south of, 25 feet east of track; iron post stamped "2,054 B 1902–10"	2,055.443
Semaphore 3437, top of concrete foundation; at base of ladder	2,164.92
Semaphore, top of concrete foundation; northwest corner	2,301.75
Rowen, 0.2 mile south of, 60 feet west of track, 20 feet east of fence, 800 feet north of road crossing; iron post stamped "2,395 B 1902–11"	2,397.159
Rowen, 0.2 mile south of, 800 feet north of road crossing, 200 feet east of wagon road, 200 feet west of railroad, in large boulder; bronze tablet stamped "2,410 1914–12"	2,412.412
Semaphore 3469, top of concrete foundation; west corner	2,506.06
Semaphore 3477, top of concrete foundation; north corner	2,588.24

	Feet
Semaphore 3483, top of concrete foundation; northwest corner	2,670.87
Keene, 360 feet south of station, 30 feet west of track; iron post stamped "2,719 B 1912–13"	2,721.674
Keene, 500 feet south of station, 50 feet west of road crossing, in top of largest boulder; bronze tablet stamped "2,739.14 1914"	2,741.476
Bridge 349–G; point on northeast corner	2,828.63
Semaphore 3505, top of concrete foundation; at base of ladder	2,914.61
Keene, 2.5 miles east of, west side of track, 20 feet south of road crossing; iron post stamped "3,064 B 1902 15"	3,066.725
Semaphore 3528, top of concrete foundation; at east corner	3,149.45
Marcel, semaphore, top of concrete foundation; at northeast corner	3,295.93

Primary leveling by L. D. Ryus in 1903 and by C. H. Semper in 1905

From Havilah southwest along highway following Kern River to Caliente

Havilah, 4.6 miles south of, 2,400 feet south of summit of mountain, on east edge of road, in small canyon, in large granite rock, west face; aluminum tablet stamped "4072 G 1905 16 S"	4,074.770
Walkers Basin, 0.8 mile north of, W. Rankin's ranch house, on east side of road, 10 feet west of fence, west face of large rock; aluminum tablet stamped "3335 G 1905 17 S"	3,338.426
Walkers Basin, 5.5 miles south of, 0.6 mile south of Oak Flat, 100 feet west of loop in road, on south edge of road, top of flat rock; aluminum tablet stamped "2900 G 1905 18 S"	2,903.607
Caliente, 3 miles northeast of, at fork of road to Pinto and Rankin camps, 10 feet west of road, large rock; aluminum tablet stamped "1534 G 1905 19 S"	1,538.040
Caliente, 65 feet south of milepost 335, 10 feet east of track; iron post[1] stamped "1201 B"	1,201.861

From Kern along highway north via Oil City station to Oil triangulation station

T. 29 S., R. 28 E., sec. 16, 2.5 miles north of Kern, 100 feet south of edge of mesa, at top of grade of road from Kern to Oil City; iron post stamped "684 B"	684.065
T. 28 S., R. 28 E., sec. 34, at quarter corner on south side of, at corner of fence, west side of road; iron post stamped "522 B"	523.492
T. 28 S., R. 28 E., sec. 21, on ridge about 1 mile north of water tank; iron post stamped "976 B"	976.927
Oil triangulation station, 1 mile southeast of, sec. 18, T. 28 S., R. 28 E., on round knob east of Mon Canyon road; iron post stamped "1133"	1,132.894

From Oil City northwest along railroad and highway to sec. 24, T. 28 S., R. 27 E.

Oil Center schoolhouse, in southeast corner of yard; iron post stamped "634 B"	634.123
T. 28 S., R. 28 E., sec. 30, near southeast corner, 1 mile north of Peerless oil claim, on road on ridge north of Stirling oil claim, 100 feet north of house, south side of road; iron post stamped "768"	768.354

[1] Elevation adjusted January, 1907.

From point 2.5 miles north of Kern southeast along second-class road and across country to milepost 320 on Southern Pacific R. R.

	Feet
T. 29 S., R. 29 E., sec. 23, 3.5 feet southwest of northeast corner; iron post stamped "829 B"	829.283
Kern, 5 miles east of, sec. 30, T. 29 S., R. 29 E., 2.5 miles north of Southern Pacific R. R. 20 feet south of road, at point where drain enters flat, east side of mouth of wash; iron post stamped "569 B"	569.471

Primary leveling by K. W. Trimble and G. L. Hagman in 1910

From point 5 miles east of Edison south along highways to T. 32 S., thence west to sec. 32, T. 32 S., R. 28 E.

Edison, 4 miles east by 0.8 mile south of, power tower 89; top of east lower brace, painted "U. S. B. M. □ 779" and stamped "779 B □"	779.13
Edison, 4 miles east by 2 miles south of, on top of east lower brace of power tower 99; chiseled square painted "U. S. □ B. M. 724" and stamped "724 B □"	724.02
Edison, 4 miles east by 2.9 miles south of, on power line of Edison Electric Co., just north of point where line goes over hill, 60 feet north of second-class road, 18 feet south of power tower 106; iron post stamped "657 B"	657.503
Edison, 4 miles east by 3.9 miles south of, top of west lower brace of power tower 115, painted "U. S. B. M. □ 596" and stamped "596 B □"; chisel mark	595.81
Edison, 4 miles east by 5 miles south of, on top of east lower brace of power tower 124, painted "U. S. □ B. M. 553"; chisel mark	553.26
Rockpile School, 1 mile west of, on Edison Electric Co.'s power line, 12 feet south of tower 132; iron post stamped "516 B"	516.371
Rockpile School, 1 mile west by 1 mile south of, on top of east lower brace of power tower 140, painted "U. S. □ B. M. 485"; chisel mark	485.16
Rockpile School, 1 mile west by 2 miles south of, on top of east lower brace of power tower 147, painted "U. S. □ B. M. 458"; chisel mark	458.37
Rockpile School, 1 mile west by 3 miles south of, on top of east lower brace of power tower 155, painted "U. S. □ B. M. 429"; chisel mark	429.49
T. 31 S., R. 29 E., southeast corner of sec. 36, 120 feet southeast of Edison Electric Co.'s power tower 163; iron post stamped "409 B"	409.021
Edison Electric Co.'s power tower 171, on north lower brace, painted "U. S. □ B. M. 416"; chisel mark	416.46
Edison Electric Co.'s power tower 179, 200 feet north of road to Tehachapi, on west lower brace, painted "U. S. □ B. M. 474"; chisel mark	474.05
T. 32 S., R. 29 E., near south quarter corner of sec. 10, at east line of north-south road; iron post stamped "442 B"	442.037
T. 32 S., R. 29 E., near north quarter section corner of sec. 27, where telephone line turns east, in base of telephone pole painted and scribed "U. S. B. M. 558"; spike	556.03

	Feet
T. 32 S., R. 29 E., near south quarter corner of sec. 34, on west edge of second-class north-south road; iron post stamped "561 B"	560.737
T. 32 S., R. 29 E., near south quarter corner of sec. 33, in base of fence post, painted and scribed "U. S. B. M. 535"; spike	532.83
T. 32 S., R. 29 E., near south quarter corner of sec. 31; iron post stamped "473 B"	473.129
T. 32 S., R. 28 E., 0.6 mile east of the southeast corner of sec. 33, at northeast edge of county road where it turns south, on fence line; iron post stamped "438 B"	438.277

From sec. 34, T. 32 S., R. 28 E., south along county road to point 3 miles south of Rose station.[1] Closure 1.159 feet

Rose, 10.7 miles north of, on county road, in base of telephone pole 1010, painted and scribed "U. S. B. M. 495;" spike	495.29
Rose, 8.5 miles north of, on county road where it goes through gate, in base of telephone pole at fence corner, painted and scribed "U. S. B. M. 635"; spike	635.28
Rose, 7.6 miles north of, in southwest corner of road where it turns east, near fence corner and telephone pole 1142; iron post stamped "711 B"	710.701
Rose, 6.6 miles north of, on county road, in base of telephone pole 1184, painted and scribed "U. S. B. M. 748"; spike	747.86
Rose, 5 miles north of, at northeast corner of T road where telephone line turns south, near telephone pole 1238; iron post stamped "763 B"	763.645
Rose, 2.8 miles north of, on county road, in base of telephone pole 1322, painted and scribed "U. S. B. M. 956"; spike	956.30

From Edison Electric Co.'s power tower 179 east along highway via Cummings Valley to point 1.2 miles southwest of Tehachapi.[1]

Edison Electric Co.'s power tower 179, 1 mile east of, at fence corner where road turns north, in base of fence post, painted and scribed "U. S. B. M. 557"; spike	556.83
Edison Electric Co.'s power tower 179, 3.1 miles east of, where road runs around projecting hill, on north side of road, in base of fence post, painted and scribed "U. S. B. M. 557"; spike	1,285.07
Edison Electric Co.'s power tower 179, 3.7 miles east of, where road runs around top of west end of a long, narrow hill projecting westward, 25 feet west of center of road, in top of granite boulder; aluminum tablet stamped "1495 B"	1,495.27
San Martinez Spring, 1.1 miles east of, on west side of road where it runs up ravine, in root of oak tree, painted "U. S. B. M 2495"; copper nail	2,495.50
Roland Hill's white shack, 0.4 mile southwest of, 50 feet west of road, in base of large oak tree, painted "U. S. B. M. 2791"; spike	2,791.43
West junction of Cummings Valley and Bear Valley roads, 395 feet south of, 15 feet south of road, on granite boulder, painted "U. S. B. M. 2914"; chisel mark	2,913.84
West junction of Cummings Valley and Bear Valley roads, 18 feet west of center of road; iron post stamped "2935 B"	2,934.325

[1] No adjustment has been made of this line owing to an excessive closure error.

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	Feet
West junction of Cummings Valley and Bear Valley roads, 1 mile east of, where road crosses saddle, at north edge of road, in base of 12-inch oak tree, painted and scribed "U. S. B. M. 3256"; spike	3,256.36
West junction of Cummings Valley and Bear Valley roads, 2.2 miles east of, at west edge of road, in base of 15-inch oak tree, painted and scribed "U. S. B. M. 3102"; spike	3,102.02
West junction of Cummings Valley and Bear Valley roads, 3.1 miles east of, 25 feet north of road, in root of big oak tree, painted and scribed "U. S. B. M. 3387"; copper nail	3,386.88
Jacks Camp, 35 feet north of road, at barn, in base of big oak tree, painted and scribed "U. S. B. M. 3495"; spike	3,493.87
Jacks Camp, 1.2 miles east of, near top of steep grade, 10 feet south of edge of road, in top of granite boulder; aluminum tablet stamped "3815 B"	3,814.124
Cummings Valley, top of grade west from, where road crosses saddle, 40 feet west of road, in root of big oak tree, painted and scribed "U. S. B. M. 4041;" copper nail	4,041.50
Cummings Valley School, 1 mile south of, at north edge of road, in base of southeast corner of well derrick, painted and scribed "U. S. 3847"; spike	3,847.53
Cummings Valley School, in southeast corner of school lot; iron post stamped "3827 B"	3,825.867
Cummings Valley School, 1.5 miles north of by 1.5 miles east of, in southwest corner of crossroads, in base of telephone pole, painted and scribed "U. S. B. M. 3904"; spike	3,904.33
Cummings Valley School, 3.5 miles northeast of, where road turns northeast before entering canyon, in northwest fence corner; iron post stamped "3953 B"	3,951.867
Dick Brite ranch, 0.8 mile west of, at north edge of road, in base of big oak stump, painted and scribed "U. S. B. M. 4148"; copper nail	4,147.98
Dick Brite ranch, 1.4 miles east of, where road turns south, at southwest corner, in base of telephone pole, painted and scribed "U. S. B. M. 4300"; spike	4,299.83
Tehachapi, 5 miles west of, at low place where road is crossed by drain, 105 feet west of gate, at north edge of road, in base of telephone pole, painted and scribed "U. S. B. M. 4187"; spike	4,187.53
Tehachapi, 4.5 miles west of, where road turns north, in northwest fence corner; iron post stamped "4253 B"	4,251.708
Tehachapi, 2.4 miles west of, at top of rise, at south edge of road, in base of telephone pole, painted and scribed "U. S. B. M. 4048"; spike	4,043.11
Tehachapi, 1.2 miles southwest of, at low place where road is crossed by drain, at north edge of road, in base of telephone pole, painted and scribed "U. S. B. M. 3985"; spike	3,984.93

KERNVILLE QUADRANGLE

[Latitude 35° 30′–36°; longitude 118°–118° 30′]

KERN AND TULARE COUNTIES

Primary leveling by C. H. Semper in 1905

From Dry Meadow south via Angel Camp and Kern River to Fairview, thence along trail and highway following Kern River to Havilah

	Feet
Kern River, junction of second Dry Meadow Creek with, 230 feet north of junction, in north wall of dry creek; aluminum tablet stamped "3765 G 1905 7 S"	3,767.761
Fairview, 150 feet directly east of Fairview Camp, 40 feet east of top of river bank, top of large granite boulder; aluminum tablet stamped "3516 G 1905 8 S"	3,519.398
Kern River, 3 miles south of, 0.5 mile north of old corral, 25 feet east of trail, northwest face of large rock 8 by 8 by 7 feet; aluminum tablet stamped "3122 G 1905 9 S"	3,125.802
Kernville, 6.3 miles north of, at Chico ranch, 85 feet south of south side of house, 30 feet west of fence, 15 feet north of ditch, north face of large rock; aluminum tablet stamped "2767 G 1905 10 S"	2,770.949
Kernville, 3.1 miles north of, 960 feet south of Frank Apalatea's ranch, on west edge of road, 15 feet west of fence line, 55 feet north of fence corner, top of rock; aluminum tablet stamped "2631 G 1905 11 S"	2,634.693
Kernville, southeast corner of A. Brown & Co.'s store; aluminum tablet stamped "2565 G 1905 12 S"	2,568.787
Hot Springs, 1.9 miles south of, Kern River Flume, north end of concrete bent foundation, on east side of road; aluminum tablet stamped "2487 G 1905 14 S"	2,491.036

Primary leveling by L. F. Biggs in 1906

From Isabella east via Onyx to Walker Pass

Isabella, on road to Death Valley, 105 feet northeast of northeast corner of Methodist Church, 8 feet north of road, top of large rock; aluminum tablet stamped "G 1905 13 2521" (Semper's)	2,525.099
Isabella, 3 miles east of, sec. 22, T. 26 S., R. 33 E., 20 feet south of road at rocky point, slate ledge; aluminum tablet stamped "B. B. 1906 1 2554"	2,555.587
Isabella, 7 miles east of, sec. 20, T. 26 S., R. 34 E., 2 feet north of fence south of road, 1,000 feet east of cottonwood trees, granite rock, flush with ground; aluminum tablet stamped "B. B. 2 2617"	2,618.291
Isabella, 9 miles east of, sec. 22, T. 26 S., R. 34 E., 1.2 miles west of Weldon, 250 feet north of cemetery, 10 feet north of road, granite boulder; aluminum tablet stamped "B. B. 1906 3 2635"	2,637.024
Weldon, 2.6 miles east of, sec. 18, T. 26 S., R. 35 E., 10 feet east of road, in saddle west of rocky point, in granite boulder; aluminum tablet stamped "B. B. 1906 4 2686"	2,688.367
Onyx, 0.8 mile east of, sec. 4, T. 26 S., R. 35 E., 100 feet east of northeast corner of field, 20 feet south of road, granite rock; aluminum tablet stamped "B. B. 1906 5 2746"	2,747.971

	Feet
Onyx, 7 miles east of, sec. 30, T. 25 S., R. 36 E., opposite Power's house, 20 feet south of road, in granite rock; aluminum tablet stamped "13 B 1906 6 2893"	2,895.527
Onyx, 9.2 miles east of, near quarter corner east side of sec. 29, T. 25 S., R. 36 E., 10 feet south of road, granite boulder; aluminum tablet stamped "B. B. 1906 7 3145"	3,147.096
Onyx, 12 miles east of, sec. 23, T. 25 S., R. 36 E., 0.5 mile north of canebrake, on grade 20 feet west of road in canyon, granite rock; aluminum tablet stamped "B. B. 1906 8 3745"	3,746.956
Onyx, 15 miles east of, near southeast corner sec. 36, T. 25 S., R. 36 E., east side of creek, 20 feet east of forks of road, granite rock; aluminum tablet stamped "B. B. 1906 9 4327"	4,329.372
Walker Pass, summit of, sec. 17, T. 26 S., R. 37 E., 18 miles east of Onyx, 15 feet east of road, granite rock; aluminum tablet stamped "B. B. 1906 10 5245"	5,248.321

MOJAVE QUADRANGLE

[Latitude 35°–35° 30′; longitude 118°–118° 30′]

KERN COUNTY

Precise leveling by L. F. Biggs in 1906

Along Atchison, Topeka & Santa Fe Ry.

	Feet
Mojave, 6 miles southeast of, 4 feet north of second pole north of milepost 812; iron post	2,541.489
Mojave, 3 miles southeast of, 10 feet north of second pole north of milepost 815; iron post	2,618.545
Mojave, 0.4 mile south of, 25 feet north of milepost 382, west of track; iron post	2,733.750

Precise leveling by R. A. Farmer in 1905

From Mojave northward along stage road to Dixie stage station

Mojave, 0.4 mile south of, 25 feet north of milepost 382, west of track; iron post stamped "2732 B"	2,733.750
Mojave, 3.5 miles northeast of, 10 feet south of road; iron post stamped "2955 B"	2,957.163
Mojave-Tehachapi-Randsburg signboard, 1.1 miles northeast of, 10 feet south of road; iron post stamped "2745 B"	2,746.641
Mojave-Tehachapi-Randsburg signboard, 4.3 miles northeast of, 10 feet east of road; iron post stamped "2588 B"	2,589.859
Mojave-Tehachapi-Randsburg signboard, 7.3 miles northeast of, 10 feet east of road; iron post stamped "2419 B"	2,421.184
Eighteenmile station, 1.8 miles south of, 20 feet east of road, 50 feet east of Copper Mining mail box; iron post stamped "2152 B"	2,154.075
Eighteenmile station, 1.1 miles north of, 10 feet east of road; iron post stamped "2108 B"	2,110.345
Eighteenmile station, 4.2 miles north of, 10 feet west of road; iron post stamped "2123 B"	2,125.158
Ricardo (formerly Red Rock) post office, 0.7 mile northwest of, 20 feet north of road; iron post stamped "2442 B"	2,443.612
Ricardo post office 3.8 miles northwest of, 40 feet west of road; iron post stamped "2902 B"	2,904.098

	Feet
Ricardo post office, 6.4 miles northwest of, 50 feet west of road, at summit of Red Rock Canyon; iron post stamped "3520 B"	3,521.681
Dixie stage station, 1.3 miles southwest of, 10 feet west of road; iron post stamped "3281 B"	3,282.463

Precise leveling by C. H. Semper in 1902 and L. F. Biggs in 1906 and 1914

From Caliente quadrangle east along Southern Pacific R. R. to Mojave, thence south to Elizabeth Lake quadrangle

Girard, 0.9 mile south of, east side of track, at entrance of west one of three tunnels; iron post stamped "3,396 B 1902–16"	3,398.740
Semaphore 3555, top of foundation; southwest corner	3,465.87
Semaphore 3562, top of foundation; northeast corner	3,534.17
Semaphore 3571, top of foundation; at base of ladder	3,641.38
Milepost 358, 500 feet northwest of, 20 feet west of track; iron post stamped "3732 B 1902–17"	3,734.697
Tehachapi, 1.8 miles west of, 50 feet north of culvert 358–F; point on concrete signal block	3,847.38
Tehachapi, 1.5 miles west of, 250 feet north of railroad, 20 feet north of highway; bronze tablet in boulder stamped "3,848 1914"	3,850.786
Semaphore 3597, at top of concrete foundation; southwest corner	3,925.32
Tehachapi, at station, 30 feet north of track, 15 feet east of highway; iron post stamped "3,969 (3,966?) B 1902–18"	3,969.715
Semaphore 3613, top of concrete foundation; southwest corner	4,009.50
Summit, top of old semaphore foundation	4,032.56
Milepost 364, 800 feet west of, on west side of track, at edge of highway; iron post stamped "3,995 B 1902–19"	3,998.409
Semaphore 3648, top of concrete foundation; northeast corner	3,975.01
Milepost 366, in center of track opposite; spike	3,921.57
Proctor, milepost 368 (367?), 700 feet west of, on east side of track, at edge of highway; iron post stamped "3,920 B 1902–20"	3,923.026
Proctor, 700 feet southeast of south end of switch, 200 feet east of railroad, at base of steep hill; bronze tablet set in rock ledge, stamped "3,921 1914–21"	3,924.472
Semaphore 3685, top of concrete foundation; at northwest corner	3,880.94
Cameron, 150 feet south of station, on west side of track, close to fence; iron post stamped "3,790 B 1902–22"	3,793.254
Semaphore 3710, top of foundation; at southeast corner	3,763.76
Semaphore 3720, top of foundation; at foot of ladder	3,690.62
LaRose road crossing, 1,000 feet east of, 800 feet west of milepost 373, 80 feet east of track; iron post stamped "3,586 B 1902–23"	3,589.176
Semaphore 3736, top of concrete foundation; northeast corner	3,505.04
Semaphore 3751, top of concrete foundation; southwest corner	3,376.65
Mojave, 4.7 miles north of, west side of track, 800 feet north of milepost 376; iron post stamped "3,272 B 1902–23"	3,274.178
Station 338+93, 100 feet north of, 28 feet south of road crossing, 42 feet north of railroad crossing (Los Angeles Aqueduct bridge), in telegraph pole marked "3,162.566;" spike	3,164.82
Mojave, 4 miles northeast of, 80 feet east of railroad, 10 feet east of point where road crosses aqueduct, in top of Los Angeles Aqueduct; bronze tablet stamped "3,162 1914–B"	3,163.918
Mojave, 2.7 miles north of, 800 feet north of milepost 378, on west side of railroad; iron post stamped "3,030 B 1902–25"	3,032.774

	Feet
Semaphore 3788, top of foundation; southeast corner	2,925.96
Semaphore 3798, top of foundation; southeast corner	2,829.52
Mojave, on switch; top of bolthead	2,757.33
Mojave, 0.4 mile south of, west side of track; iron post stamped "2,732 B 1902–26"	2,733.750
Semaphore 3826, top of concrete foundation; southeast corner	2,675.12
Mojave, 3.5 miles south of, 800 feet north of milepost 384, west side of railroad; iron post stamped "2,639 B 1902–27"	2,641.670

Precise leveling along the Los Angeles Aqueduct by the Aqueduct Commission in 1907, adjusted by the U. S. Geological Survey in 1922

Old Dixie stage station, 1.3 miles southwest of, 10 feet west of road in bottom of wash, half a mile south of Harmon's L line station 99+00; standard U. S. G. S. pipe No. 60, stamped "L. A. A. 60" and elevation on side of cap	3,282.463

From Red Rock summit to end of Bayley's division

Harmon's and Bayley's L line station 0+00, on knoll 200 feet southeast of, at Red Rock summit; standard L. A. A. pipe No. 61, marked with red, white, and blue flag	3,350.673
Bayley's L line station 118+00, 250 feet southeast of, 150 feet northeast of stage road; standard L. A. A. pipe No. 62, marked with red, while, and blue flag	3,320.907
Bayley's X line station 253+00, 100 feet east of, about 1,500 feet south of San Antonio mine road; standard L. A. A. pipe No. 63, marked with red, white, and blue flag	3,310.770
Bayley's X line station 365+00, 100 feet west of, 60 feet north of old San Bernardino road; standard L. A. A. pipe, marked with red, white, and blue flag	3,300.416
Bayley's X line station 518+50, 200 feet east of, on mesa north of Sugar Loaf Park; standard L. A. A. pipe No. 65, marked with red, white, and blue flag	3,285.953
Bayley's X line station 3+05, 25 feet east of, on mesa north of Jawbone siphon; standard L. A. A. pipe No. 66, marked with red, white, and blue flag	3,264.295
Bayley's T line station 656+00, about 375 feet east of, near top of hill south side Jawbone Canyon, at end of siphon; brass plug in rock, printed L. A. A. B. M. No. 67, marked with red, white, and blue flag	3,240.139
Bayley's X line station 718+00, 150 feet east of, across draw on hillside; standard L. A. A. pipe No. 68, marked with red, white, and blue flag	3,237.838
Bayley's T line station 758+26, 200 feet west of, on line produced north side Water Canyon, above small cottonwood trees; standard L. A. A. pipe No. 69, marked with red, white, and blue flag	3,253.888
Bayley's H line station 21+82, 200 feet east of, across canyon, in right branch S. B. Canyon, just above rock gorge; standard L. A. A. pipe No. 70, marked with red, white, and blue flag	3,204.183
Bayley's H line station 32.90, 30 feet south of, on small ridge south side left branch S. B. Canyon; iron stake driven in soft rock No. 71, marked with red, white, and blue flag. Elevation marked on wood stake	3,216.816

	Feet
Bayley's Z line station 198+80, 20 feet north of, on small ridge south side of "Z" Canyon, 100 feet southeast of cottonwood tree; standard L. A. A. pipe No. 72, marked with red, white, and blue flag	3,216.430
Bayley's I line station 21+66, 100 feet southwest of, on south side of Coyote Canyon; standard L. A. A. pipe No. 73, marked with red, white, and blue flag	3,216.005
Bayley's P line station 901+00, 150 feet west of, on ridge north side of Pine Canyon, near entrance of siphon; standard L. A. A. pipe No. 74, marked with red, white, and blue flag	3,225.928
Bayley's P. C. line station 15+48, 150 feet east of, across small canyon on rocky point, near south side of Pierce Canyon; standard L. A. A. pipe No. 75	3,230.227
Bayley's P. D. line station 15+00, 100 feet south of, on rocky ridge across canyon, in first deep canyon south of Pine Canyon; standard L. A. A. pipe No 76, marked with red, white, and blue flag	3,185.756
Bayley's P. E. line station 8+00, 50 feet south of, on rocky ridge, in second deep canyon south of Pine Canyon; standard L. A. A. pipe No. 77, marked with red, white, and blue flag	3,218.224
Bayley's T line station 1106+00, 15 feet east of, on ridge north side of deep wash west of Nine Mile Camp; standard L. A. A. pipe No. 78, marked with red, white, and blue flag	3,177.525
Bayley's T line station 1181+58, 10 feet west of, 60 feet east of Kellar's station 0+00 where grade enters the plains; standard L. A. A. pipe No. 79, marked with red, white, and blue flag	3,164.105
Kellar's located line station 157+75, 175 feet west of; standard L. A. A. pipe No. 80, marked with red, white, and blue flag	3,180.058

From Pinto Hills to Elizabeth Tunnel

Kellar's located line station 251–00, 200 feet west of, north of Mojave; standard L. A. A. pipe No. 81, marked with red, white, and blue flag	3,177.594
Kellar's L line station 341–00, 110 feet west of, 300 feet west of Southern Pacific R. R. northwest of Mojave; standard L. A. A. pipe No. 82, marked with red, white, and blue flag	3,165.998
Kellar's L line station 510–00, 200 feet northwest of, north side of Antelope Valley; standard L. A. A. pipe No. 83, marked with red, white, and blue flag	3,170.229
Kellar's L line station 680–00, 200 feet northwest of, north side of Antelope Valley; standard L. A. A. pipe No. 84, marked with red, white, and blue flag	3,155.445

WHITE RIVER QUADRANGLE

[Latitude 35° 30′–36°; longitude 118° 30′–119°]

KERN AND TULARE COUNTIES

Primary leveling by L. D. Ryus in 1903 and by C. H. Semper in 1905

At Oil triangulation station

	Feet
Oil triangulation station, sec. 7, T. 28 S., R. 28 E.; tablet marking station, stamped "1205"	1,205.588

From sec. 18, T. 28 S., R. 28 E., north along highway via Mon Canyon and Granite Canyon to point 2.4 miles north of Poso Creek stage station

	Feet
Poso Creek stage station, 0.2 mile east of, sec. 4, T. 28 S., R. 28 E., 300 feet east of water trough, 30 feet south of road at point where road enters creek bottom, 200 feet west of head of old canal; iron post stamped "633 B"	633.176
T. 27 S., R. 28 E., sec. 22, at fork of Granite Canyon, 2.4 miles north of Poso Creek, 20 feet west of bank; iron post stamped "884 B"	884.126

At Havilah

Havilah, Havilah Commercial Co.'s building, north end, front face; aluminum tablet stamped "3160 G 1905 15 S"	3,164.002

DEGREE QUADRANGLE 35°–36°, 119°–120°

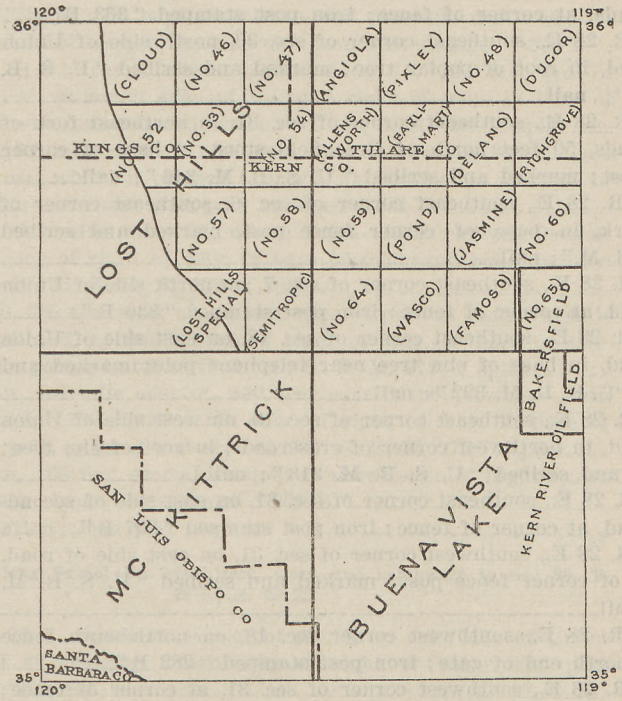


FIGURE 22.—Diagram of degree quadrangle 35°–36°, 119°–120°

BUENA VISTA LAKE QUADRANGLE

[Latitude 35°–35° 30′; longitude 119°–119° 30′]

KERN COUNTY

Precise leveling by C. H. Semper in 1902

Southeast along Southern Pacific R. R. near Jewetta

	Feet
Milepost 304, opposite, 43 feet east of track; iron post stamped "427 B"	428.049
Jewetta, in front of station; top of rail	454.3
Jewetta, 1 mile southeast of, opposite milepost 307, 40 feet east of track; iron post stamped "448 B"	448.621
Milepost 311, opposite, on east side of track, at fence line; iron post stamped "409 B"	410.151

Primary leveling by L. D. Ryus in 1903, by L. F. Biggs in 1908, and by K. W. Trimble in 1910

From Bakersfield south along Union Avenue road to T. 32 S., Rs. 27 and 28 E., thence northwest along highways to Connor station

	Feet
T. 30 S., R. 28 E., southeast corner of sec. 18, on east side of Union Ave. road at road fork, in base of corner fence post; marked and scribed "U. S. B. M. 372"; nail	372.46
T. 30 S., R. 28 E., southeast corner of sec. 19, in northeast fork of cross-roads, at corner of fence; iron post stamped "363 B"	362.788
T. 30 S., R. 28 E., southeast corner of sec. 30, north side of Union Ave. road, in root of poplar tree; marked and scribed "U. S. B. M. 355"; nail	354.95
T. 30 S., R. 28 E., southeast corner of sec. 31, in northeast fork of cross-roads, 50 feet north of Greenfield store, in base of corner fence post; marked and scribed "U. S. B. M. 346"; nail	346.11
T. 31 S., R. 28 E., southeast corner of sec. 6, southeast corner of road fork, in base of corner fence post, marked and scribed "U. S. B. M."; nail	338.48
T. 31 S., R. 28 E., southeast corner of sec. 7, on north side of Union Ave. road, at corner of fence; iron post stamped "330 B"	330.616
T. 31 S., R. 28 E., southeast corner of sec. 18, on east side of Union Ave. road, in base of elm tree near telephone pole; marked and scribed "U. S. B. M. 322"; nail	322.36
T. 31 S., R. 28 E., southeast corner of sec. 19, on west side of Union Ave. road, in northwest corner of crossroads, in root of elm tree; marked and scribed "U. S. B. M. 313"; nail	313.33
T. 31 S., R. 28 E., southeast corner of sec. 31, on east side of second-class road, at corner of fence; iron post stamped "297 B"	297.215
T. 31 S., R. 28 E., southwest corner of sec. 31, on east side of road, in base of corner fence post; marked and scribed "U. S. B. M. 300"; nail	300.44
T. 32 S., R. 28 E., southwest corner sec. 18, on north-south fence line at north end of gate; iron post stamped "282 B"	281.863
T. 32 S., R. 28 E., southwest corner of sec. 31, at corner of fence; iron post stamped "352 B"	352.608
T. 32 S., R. 27 E., southwest corner of sec. 36, in base of corner fence post; marked and scribed "U. S. B. M. 345"; nail	344.95
Sicarte Lodge, 2 miles west of, on northwest-southeast fence line, in base of fence post; marked and scribed "U. S. B. M. 295"; nail	295.36
Sicarte Lodge, 3 miles west of, 5 feet north of second-class road along northwest-southeast fence line; iron post stamped "297 B"	296.697
T. 32 S., R. 27 E., southeast corner of sec. 18, on west side of Santa Media road, in northwest corner of road fork, at corner of fence; iron post stamped "294 B"	294.557
T. 32 S., R. 27 E., southeast corner of sec. 7, in northwest corner of crossroads, in base of corner fence post; marked and scribed "U. S. B. M. 288"; nail	288.48
T. 32 S., R. 27 E., southeast corner of sec. 6, on east side of Santa Media road, in base of telephone pole; marked and scribed "U. S. B. M. 291"; nail	290.76

From point about 2 miles southeast of Rio Bravo west along Southern Pacific R. R. to point 1.1 miles west of Buttonwillow

	Feet
Milepost 335, 190 feet west of, in base of telephone pole; painted and scribed "U. S. B. M. 322"; spike	321.84
Milepost 337, 180 feet west of, at beginning of railroad curve, in base of telegraph pole; painted and scribed "U. S. B. M. 315"; spike	315.21
T. 29 S., R. 25 E., at southwest corner of sec. 17, 1,300 feet west of milepost 339, at east edge of private-road crossing, north edge of railroad right of way, in fence corner; iron post stamped "300 B"	300.741
T. 29 S., R. 24 E., near southeast corner of sec. 14, 1,450 feet west of milepost 341, at north edge of railroad right of way, in base of telegraph pole, painted and scribed "U. S. B. M. 290"; spike	289.99
Bowerbank, 0.8 mile east of, 1,300 feet west of milepost 343, at east edge of road where it crosses railroad, at north edge of right of way, in fence corner; iron post stamped "291 B"	290.807
Bowerbank, 1.5 miles west of, where fence along railroad begins, at north edge of right of way, in base of telegraph pole; painted and scribed "U. S. B. M. 292"; spike	292.84
Milepost 346, 500 feet west of, at east edge of private road where it crosses railroad, at north edge of right of way, in base of telegraph pole, painted and scribed "U. S. B. M. 278"; spike	277.91
Buttonwillow, 0.8 mile east of, 350 feet east of point where main road crosses railroad, at north edge of right of way, in base of telegraph pole, painted and scribed "U. S. B. M. 272"; spike	272.04
Buttonwillow, 165 feet east of station, at north edge of highway, in fence corner; iron post stamped "269 B"	269.093
Kern, at station; iron post stamped "B"	422.083

From Kern along Sunset Ry. southwest, west, and northwest to sec. 36, T. 29 S., R. 25 E.

T. 30 S., R. 28 E., southeast corner of sec. 6, on west side of Union Ave. road at crossing, north side of right of way; iron post stamped "392 B"	392.496
T. 30 S., R. 27 E., southeast corner of sec. 15, 1.7 miles west of Wible orchard, at west side of wagon road, at north edge of railroad right of way; iron post stamped "369 B"	369.447
Gosford, in front of station; top of rail	362.2
T. 30 S., R. 27 E., northwest corner of sec. 20, 1.7 miles west of Gosford, at south side of road, opposite crossing of road to ranch house; iron post stamped "358 B"	358.751
T. 30 S., R. 26 E., near quarter corner on south side of sec. 15, 1,200 feet west of milepost 328, north edge of right of way; iron post stamped "346 B"	347.013
T. 30 S., R. 26 E., sec. 7, 1.5 miles west of Stevens, 200 feet south of track, at corner of fence, 500 feet west of milepost 331, 20 feet east of gate; iron post stamped "337 B"	337.948
T. 29 S., R. 25 E., south of northwest corner of sec. 36, on east side of county road, north edge of railroad right of way; iron post stamped "327 B"	327.810

From point on Sunset Ry. north along wagon road to Rio Bravo School, thence east to Atchison, Topeka & Santa Fe Ry. track

	Feet
T. 29 S., R. 25 E., near quarter corner on east side of sec. 11, at southeast corner of Rio Bravo School yard; iron post stamped "332 B"	332.478
T. 28 S., R. 26 E., quarter corner on south side of sec. 32, opposite north corner common to secs. 4 and 5, T. 29 S., north side of wagon road, at west edge of railroad right of way; iron post stamped "339 B"	339.843

Southeast along Atchison, Topeka & Santa Fe Ry. to Kern

T. 29 S., R. 26 E., near southeast corner of sec. 14, 0.25 mile east of Rosedale, 1 mile north of Rosedale post office, west side of county road, north line of railroad right of way; iron post stamped "360 B"	360.812
T. 29 S., R. 27 E., quarter corner on east side of sec. 29, 4 miles west of Bakersfield, west side of public road, north line of railroad right of way; iron post stamped "387 B"	387.566

From point 1 mile east of Oil triangulation station southwest along road 3 miles, thence southwest across country to point 1 mile southeast of Jewetta

T. 28 S., R. 27 E., SW. ¼ sec. 25, 1.5 miles north of Standard Oil Co.'s storage reservoirs, east bank of ravine, west side of Bakersfield and Poso Creek road; iron post stamped "730"	730.555

From Oil triangulation station southwest across country to sec. 14, T. 28 N., R. 27 E., thence south to point near Jewetta

T. 28 N., R. 27 E., at center of sec. 14, 2 miles southwest of Oil triangulation station; iron post stamped "864"	864.460

From Oil triangulation station southwest across country to sec. 14, T. 28 N., along Sunset Ry. to Sunset

Kern, 130 feet east of northeast corner of station, at south end of road at corner of fence; iron post stamped "421 B"	422.083
Gosford Junction, 2 miles south of, 25 feet west of intersection of roads, 25 feet north of ditch, in base of signal post scribed and painted "351;" nail	351.70
Gosford Junction, 3 miles south of, at road crossing, north of road, east of track, in fence corner; iron post stamped "343 1"	343.175
Gosford Junction, 6 miles south of, 30 feet west of track at section line, 15 feet north of ditch, 0.5 mile south of milepost 15; iron post stamped "320 2"	320.166
Connor, 500 feet east of station, north of track, at corner of secs. 31, 32, 5, and 6, Tps. 31 and 32 S., R. 27 E.; iron post stamped "293 3"	293.162
Connor, in front of station; top of rail	292.8
Connor, 2 miles west of, at corner of secs. 35, 36, 1, and 2, Tps. 31 and 32 S., R. 26 E.; iron post stamped "291 B 1908 4 B"	291.175
Millux, 0.4 mile west of, 25 feet north of track, at corner of secs. 32, 33, 4, and 5, Tps. 31 and 32 S., R. 26 E.; iron post stamped "291 B 1908 B 5"	291.176
Millux, 2.3 miles west of, 500 feet north of switch from main line along levee of Buena Vista Lake, 250 feet north of milepost 26, 30 feet north of track; iron post stamped "298 B 1908 B 6"	298.092

	Feet
Buena Vista Lake; surface of water January 9, 1908	290.7
T. 32 S., R. 26 E., 110 feet west of corner of secs. 7, 8, 12, and 13, 2.3 miles west by 1.6 miles south of Millux, at road crossing, in base of signal post scribed and painted "299 B. M. 13;" spike	299.04
Millux, 2.3 miles west by 2.9 miles south of, east of track, 200 feet north of bridge 29–A, 10 feet east of third telephone pole east of milepost 29; iron post stamped "314 B 1908 7 B"	313.211
Sunset, 7.3 miles northeast of, south of track, 600 feet south of bridge 32–B, at milepost 32; iron post stamped "409 B 1908 8 B"	409.177
Sunset, 4.4 miles northeast of, 25 feet south of track, at milepost 35; iron post stamped "564 B 1908 9 B"	564.186
Sunset, 1.4 miles northeast of, 25 feet east of track at road crossing, 25 feet north of bridge 38 B; iron post stamped "686 B 1908 10 B"	686.136
Sunset Hazelton, in front of station; top of rail	766.9
Sunset, at north end of station; iron post stamped "767 B 1908 11 B"	767.731
From Sunset west toward Job's ranch	
Sunset, 1.5 miles west of, east of road, on rock painted "938 B. M. 21"; chisel point	938.19
Sunset, 3.9 miles west of, 500 feet west of junction of road to Job's ranch, north of road, on rock painted "1339 B. M. 23;" chisel point	1,339.93
Sunset, 6.6 miles west of, 30 feet south of road, 300 feet west of spring at foot of steep grade, 25 feet west of edge of gulch; iron post stamped "1807 B 1908 12 B"	1,806.889
From Sunset northwest toward McKittrick	
Sunset, 1.8 miles northwest of, west of road at railroad crossing; iron post stamped "852 B 1908 38 B"	851.556
Sunset, 5.4 miles northwest of, east of road, 2,000 feet west of old derrick, 100 feet north of drain; iron post stamped "752 B 1908 37 B." (Disturbed, according to letter from R. J. Reed, dated Aug. 9, 1910)	752.050
Taft, 0.5 mile south of, east of road at crossroads; iron post stamped "1115 B 1908 36 B." (Disturbed, according to letter from R. J. Reed, dated Aug. 9, 1910)	1,115.36
Midland, 1 mile east of, east of road, 50 feet north of junction, 1,000 feet north of large drain; iron post stamped "1126 B 1908 36 B." (Disturbed, according to letter from R. J. Reed, dated Aug. 9, 1910)	1,126.143
Primary leveling by L. D. Ryus in 1903 and by S. N. Stoner in 1904	
From Kern along Sunset branch of Southern Pacific R. R. southwest, west, and northwest to sec. 36, T. 29 S., R. 25 E.	
Kern, at station; iron post stamped "B"	422.077
T. 30 S., R. 28 E., southeast corner of, sec. 6, on west side of Union Ave. road at crossing, north side of railroad right of way; iron post stamped "392 B"	392.478
T. 30 S., R. 27 E., southeast corner of sec. 15, 1.68 miles west of Wible orchard, at west side of wagon road, at north edge of railroad right of way; iron post stamped "369 B"	369.409

	Feet
Gosford, in front of station; top of rail	362.2
T. 30 S., R. 27 E., northwest corner of sec. 20, 1.7 miles west of Gosford, at south side of road, opposite crossing to ranch house; iron post stamped "358 B"	358.751
T. 30 S., R. 26 E., near quarter corner on south side of sec. 15, 1,200 feet west of milepost 328, north edge of right of way; iron post stamped "346 B"	347.013
T. 30 S., R. 26 E., sec. 7, 1.5 miles west of Stevens, 200 feet south of track, at corner of fence, 500 feet west of milepost 331, 20 feet east of gate; iron post stamped "337 B"	337.948
T. 29 S., R. 25 E., south of northwest corner of sec. 36, on east side of county road, north edge of railroad right of way; iron post stamped "327 B"	327.810

From Sunset branch north along wagon road to Rio Bravo School, thence east to Santa Fe Ry.

T. 29 S., R. 25 E., near quarter corner on east side of sec. 11, at southeast corner of Rio Bravo School yard; iron post stamped "332 B"	332.478
T. 28 S., R. 26 E., quarter corner on south side of sec. 32, opposite north corner common to secs. 4 and 5, T. 29 S., north side of wagon road, at west edge of railroad right of way; iron post stamped "339 B"	339.843

Southeasterly along Santa Fe Ry. to Kern

T. 29 S., R. 26 E., near southeast corner of sec. 14, 0.25 mile east of Rosedale, 1 mile north of Rosedale post office, west side of county road, north edge of railroad right of way; iron post stamped "360 B"	360.812
T. 29 S., R. 27 E., quarter corner on east side of sec. 29, 4 miles west of Bakersfield, west side of public road, north edge of railroad right of way; iron post stamped "387 B"	387.566

From point 1 mile east of Oil triangulation station southwest along road 3 miles, thence southwest across country to point 1 mile southeast of Jewetta

T. 28 S., R. 27 E., SW. ¼ sec. 25, Standard Oil Co.'s storage reservoirs 1.5 miles north of, east bank of ravine, west side of Bakersfield and Poso Creek road; iron post stamped "730"	730.555

From Oil triangulation station southwest across country to sec. 14, T. 28 S., R. 27 E., thence south to point near Jewetta

T. 28 S., R. 27 E., at center of sec. 14, 2 miles southwest of Oil triangulation station; iron post stamped "864"	864.460

UNNAMED QUADRANGLE

[Latitude 35° 30′–36°; longitude 119°–119° 30′]

KERN AND TULARE COUNTIES

Precise leveling by C. H. Semper in 1901–2

From Pixley south along Southern Pacific R. R. to milepost 301

	Feet
Pixley, in front of station; top of rail	274.7
Milepost 268, 15 feet south of, west side of track, at fence line; iron post stamped "275 B"	275.836

	Feet
Milepost 271, opposite, east side of track, at margin of fence; iron post stamped "276 B"	276.629
Milepost 274, opposite, west side of track, at margin of fence; iron post stamped "293 B"	293.417
Milepost 277, opposite, west side of track, at margin of fence; iron post stamped "303 B"	304.013
Delano, 0.8 mile north of, opposite milepost 280, west side of track, at margin of fence; iron post stamped "316 B"	317.012
Delano, in front of station; top of rail	319.1
Delano, 2.1 miles south of, 12 feet south of milepost 283, west side of track; iron post stamped "307 B"	307.505
Milepost 286, 12 feet south of, west side of track, at margin of highway; iron post stamped "342 B"	342.256
Milepost 289, 12 feet south of, west side of track; iron post stamped "376 B"	376.971
Famoso, 0.7 mile north of, opposite milepost 293, east side of track, at margin of highway; iron post stamped "415 B"	415.793
Famoso, in front of station; top of rail	423.8
Milepost 295, opposite, east side of track, at margin of highway; iron post stamped "439 B"	439.305
Milepost 298, opposite, 45 feet east of track; iron post stamped "442 B"	442.605
Milepost 301, opposite, 40 feet east of track; iron post stamped "415 B"	415.355

Primary leveling by L. D. Ryus in 1903

From Poso Creek stage road station west down Poso Creek to sec. 29, T. 27 S., R. 27 E., thence south to point near Jewetta

T. 27 S., R. 28 E., sec. 31, in Poso Creek Valley, 2.8 miles west of stage station, 30 feet south of road, at bend of road; iron post stamped "593 B"	593.572
T. 27 S., R. 27 E., sec. 24, 8 miles north of Jewetta, mouth of drain, on end of spur, north side of road at point where road leaves Poso Creek bottom; iron post stamped "545 B"	545.597

From Granite Canyon northwest along trail and ridge to Mount Poso (Poso triangulation station), thence south to Poso Creek

Poso triangulation station; iron post stamped "1214 B"	1,214.865

LOST HILLS QUADRANGLE

[Latitude 35° 30′–36°; longitude 119° 30′–120°]

KERN, KINGS, AND TULARE COUNTIES

Primary leveling by L. F. Biggs in 1908

From Somner's ranch northeast to forks of road 0.5 mile northeast of Rock Corral

	Feet
Somner's ranch, 3.5 miles northeast of, 20 feet west of wash, north of road, 100 feet north of wire fence, on rock painted "1350 B. M."; chisel point	1,350.07
Somner's ranch, 8.2 miles northeast of, 0.5 mile west of Rock Corral, east of road; point on small rock painted "1005 B. M. 64"	1,009.081

	Feet
Rock Corral, 0.5 mile east of, at junction of Coalinga-McKittrick road, 50 feet south of bank of wash; iron post stamped "949 B 1908 24 B"	949.469
Rock Corral, 6.8 miles southeast of, east of road, 50 feet east of junction; iron post stamped "1039 B 1908 26 B"	1,039.338
Rock Corral, 3.6 miles southeast of, southeast of east side of road, 2,000 feet southeast of small drain; iron post stamped "912 B 1908 25"	911.790
Rock Corral, 0.5 mile east of, at junction of Coalinga and McKittrick roads, 50 feet south of bank of wash; iron post stamped "949 B 1908 24 B"	949.469
Rock Corral, 4.02 miles northwest of, east of road; iron post stamped "706 B 1908 39 B"	707.363
Rock Corral, 8.1 miles northwest of, east of road, at junction of roads; iron post stamped "547 B 1908 40 B"	547.503

M'KITTRICK QUADRANGLE

[Latitude 35°–35° 30′; longitude 119° 30′–120°]

KERN, SAN LUIS OBISPO, AND SANTA BARBARA COUNTIES

Primary leveling by L. F. Biggs in 1908 and G. L. Hagman in 1910

From point 1.1 miles west of Buttonwillow southwest along highway and Southern Pacific R. R. to McKittrick

	Feet
Milepost 350, 340 feet west of, 50 feet east of private crossing, at north edge of right of way, in base of telephone pole painted and scribed "U. S. B. M. 262"; spike	262.22
Lokern, 0.5 mile east of, where road turns and crosses railroad, at north edge of road, on telephone line; iron post stamped "268 B"	267.947
Milepost 355, 435 feet south of, 150 feet north of point where highway crosses railroad, in base of telephone pole painted and scribed "U. S. B. M. 477"; spike	478.00
Milepost 356, 195 feet south of, in base of telephone pole painted and scribed "U. S. B. M. 555"; spike	556.04
McKittrick, 4.9 miles northeast of, 12 feet south of milepost 357; iron post stamped "641 B"	642.063
McKittrick, 3.9 miles northeast of, 180 feet south of milepost 358, in base of telephone pole painted and scribed "U. S. B. M. 731"; spike	731.52
McKittrick, 2.9 miles northeast of, at milepost 359, in base of telephone pole painted and scribed "U. S. B. M. 794"; spike	794.47
McKittrick, 1.9 miles northeast of, 180 feet south of milepost 360, in base of telephone pole painted and scribed "U. S. B. M. 891"; spike	891.56
McKittrick, 0.9 mile east of, 180 feet west of milepost 361, in base of telephone pole painted and scribed "U. S. B. M. 982"; spike	982.82

From point near Job's ranch northwest to Simmler

Job's ranch, about 1.5 miles northwest of, north of road, 150 feet north of wire fence, on small rock, painted "2750 B. M. 27"; chisel point	2,749.95
Job's ranch, 2.5 miles northwest of, on summit, 25 feet north of road, 200 feet northwest of junction of roads; iron post stamped "2871 B 1908 B B"	2,871.164

	Feet
Job's ranch, 6.4 miles northwest of, north of road; point on small rock painted "2389 B. M. 30"	2,388.992
Job's ranch, 8.5 miles northwest of, 1,000 feet north of two small houses, 20 feet north of road; iron post stamped "2,239 B 1908 14 B"	2,239.129
Job's ranch, 10.6 miles northwest of, north of road; point on small rock painted "2097 B. M. 33"	2,097.60
Job's ranch, 13 miles northwest of, 100 feet west of windmill at sheep camp, 50 feet north of house; iron post stamped "2158 B 1908 15 B"	2,158.116
Kern County Land Co. ranch (R. Scott, foreman), 1 mile north of, west of road, in small rock; aluminum tablet stamped "2178 B 1908 16 B"	2,177.829
Kern County Land Co. ranch, 5.5 miles north of, 40 feet west of water tank; iron post stamped "1943 B 1908 17 B"	1,943.278
Kern County Land Co. ranch, 6.8 miles north of, north of road; point on small rock painted "1942 B. M. 37"	1,942.70
Miller & Lux cattle station, 2.3 miles southeast of, north of road; point on small rock painted "1935 B. M. 39"	1,935.13
Miller & Lux cattle station, 150 feet south of water tank, at fence corner; iron post stamped "1949 B 1908 18 B"	1,949.757
Carissa Chemical Co. soda works, 2.4 miles northwest of, north of road; point on small rock painted "1939 B. M. 43"	1,939.18
Hathaway Wells, at pump near fence; iron post stamped "1930 B 1908 19 B"	1,930.366
Simmler, 3.1 miles south of, east of road; point on small rock painted "1952 B. M. 48"	1,950.07
Simmler, 250 feet north of post office, 50 feet north of old flour mill, T. 30 S., R. 19 E., northwest corner; iron post stamped "2047 B 1908 20 B"	2,047.283

From point 10 miles southeast of McKittrick northwest to point 8.5 miles northwest of Fraziers Spring

McKittrick, 9.7 miles southeast of, 100 feet west of road; iron post stamped "1197 B 1908 35 B"	1,197.269
McKittrick, 6.5 miles southeast of, east of road, 50 feet south of drain, 800 feet west of old derrick; iron post stamped "1275 B 1908 34 B"	1,275.453
McKittrick, 3.5 miles southeast of, east of road, 5 feet north of telephone pole; iron post stamped "1410 B 1908 33 B"	1,409.83
McKittrick, southeast corner of schoolhouse lot; iron post stamped "1110 B 1908 32 B"	1,110.514
McKittrick, in front of station; top of east rail	1,050.8
McKittrick, 3.7 miles northwest of, south of road, 150 feet east of junction of roads, 150 feet west of pumping station, 15 feet south of road; iron post stamped "1244 B 1908 31 B"	1,244.156
Fraziers Spring, 1.8 miles northwest of, east of road, 10 feet north of junction; iron post stamped "910 B 1908 30 B"	909.967
Fraziers Spring, 4.8 miles northwest of, east of road, at junction of roads, 100 feet west of drain; iron post stamped "935 B 1908 29 B"	935.431
Fraziers Spring, 8.5 miles northwest of, 75 feet east of road, 500 feet north of canyon, at saddle, top of boulder; aluminum tablet stamped "1333 B 1908 28 B"	1,332.771

From point 8.5 miles northwest of Fraziers Spring northwest to forks of road 4.4 miles southeast of Orchard Well

	Feet
Rock Corral, 12.6 miles southeast of, east of road, 200 feet south of drain, on large boulder, painted "1166 B. M. 70"; chisel point	1,166.64
Rock Corral, 11.3 miles southeast of, at road junction, 25 feet southeast of drain, east of road; iron post stamped "1175 B 1908 27 B"	1,175.303

Primary leveling by H. S. Crowe in 1901

From Wasioja northwest across southwest part of quadrangle

Wasioja post office, 6.9 miles northwest of, 1 foot south of fence line across Powell Canyon, 6 feet west of west gate post, on Cuyama ranch No. 1; iron post stamped "1551 L. A."	1,554.481
Cuyama River, opposite Spanish ranch house; surface of water July 12, 1901	1,481.4

Primary leveling by Gerald Fitz Gerald in 1919

From Hathaway Wells southwest along highways across quadrangle near its northwest corner and into Avenal quadrangle

Goodwin ranch (H. T. Nye, Supt.), 2.5 miles south of, in boundary post, 20 feet east of road; nail, post scribed "2090"	2,090.98
Goodwin ranch, 3.1 miles south of, 400 feet west of summit, at wire gate, south side of road, in post brace; nail, "2274" scribed on post	2,274.81
Goodwin ranch, 3.9 miles south of, 4 miles east of Carisa ranch, 50 feet north of road; aluminum tablet in small rock stamped "2209"	2,209.828

DEGREE QUADRANGLE 35°–36°, 120°–121°

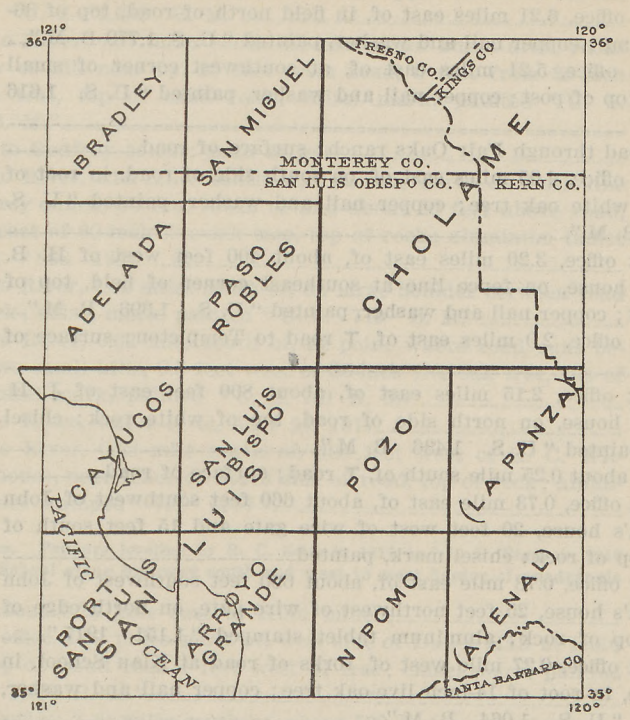


FIGURE 23.—Diagram of degree quadrangle 35°–36°, 120°–121°

ADELAIDA QUADRANGLE

[Latitude 35° 30′–35° 45′; longitude 120° 45′–121°]

SAN LUIS OBISPO COUNTY

Leveled twice. Primary leveling by R. C. Seitz in 1917 and L. F. Biggs in 1918

From east border of quadrangle along highways west to Klau School

	Feet
Paso Robles, 4.88 miles west of, east side of road at south end of bend, 2,150 feet east of entrance to San Ignacio ranch on rock painted "U. S. 1,401 B. M."; chiseled mark	1,401.10
Paso Robles, 5.84 miles west of, north side of road at southwest corner of the D. Terris ranch; iron post stamped "1,575 1917"	1,574.884
Paso Robles, 6.88 miles west of, 10 feet north and about 4 feet below road, top of white rock; chiseled mark, painted "U. S. 1,707 B. M."	1,706.90
Upper entrance to Rancho San Ignacio road	1,710.4
Paso Robles, 7.70 miles west of, 8.21 miles east of Klau post office, 50 feet west of watering trough, in root of large leaning live oak tree; copper nail and washer, painted "U. S. 1,643 B. M."	1,643.54

	Feet
Klau post office, 7.21 miles east of, 500 feet east of summit, large rock on upper side of road; bronze tablet stamped "1913–1917"	1,913.184
Summit of road	1,939.4
Fair Oaks triangulation station, aluminum tablet stamped 2320–1918	2,320.917
Klau post office, 6.21 miles east of, in field north of road, top of 36-inch stump; copper nail and washer, painted "U. S. 1,779 B. M."	1,778.94
Klau post office, 5.21 miles east of, at southwest corner of small bridge, top of post; copper nail and washer, painted "U. S. 1,616 B. M."	1,616.54
Private road through Fair Oaks ranch; surface of road	1,577.9
Klau post office, 4.05 miles east of, on south side of road, in root of 51-inch white oak tree; copper nail and washer, painted "U. S. 1,522. B. M."	1,522.30
Klau post office, 3.20 miles east of, about 400 feet west of H. B. Blake's house, on fence line at southeast corner of field, top of low post; copper nail and washer, painted "U. S. 1,393 B. M."	1,393.55
Klau post office, 2.9 miles east of, T road to Templeton; surface of road	1,355.2
Klau post office, 2.15 miles east of, about 800 feet east of J. H. White's house, on north side of road, top of white rock; chisel mark, painted "U. S. 1,436 B. M."	1,436.13
Adelaida, about 0.25 mile south of, T road; surface of road	1,385.5
Klau post office, 0.73 mile east of, about 660 feet southwest of John Joaquin's house, 20 feet west of wire gate and 15 feet south of road, top of rock; chisel mark, painted	1,146.32
Klau post office, 0.73 mile east of, about 660 feet southwest of John Joaquin's house, 25 feet northwest of wire gate, on north edge of road, top of rock; aluminum tablet stamped "1,151 1917"	1,150.700
Klau post office, 0.27 mile west of, forks of road at Klau School, in triangle, in root of 14-inch live-oak tree; copper nail and washer, painted "U. S. 1,064 B. M."	1,064.53

Primary leveling by R. C. Seitz in 1917

From Klau School north along highways to Bradley quadrangle

Klau School, 0.84 mile north of, on edge of Las Tablas Creek at point where road enters field, in root of sycamore tree; copper nail and washer, painted "U. S. 989 B. M."	989.28
Klau School, 2.23 miles northwest of, 450 feet south of F. M. Villigas's house, on east edge of road at sharp bend, on chalk rock; chisel mark, painted "U. S. 961 B. M."	960.84
Klau School, 3.31 miles northwest of, T road east to Adelaida, 65 feet south of Las Tablas ranch gate, in triangle, on rock; aluminum tablet stamped "907 1917"	907.264
Klau School, 4.50 miles northwest of, 1.20 miles north of south entrance to Las Tablas ranch, post at east end of small box culvert; copper nail and washer, painted "U. S. 850 B. M."	850.49
Klau School, 5.44 miles northwest of, 0.28 mile north of D. A. Dody's house (old Gibbons post office), 90 feet west of wooden bridge, on rock on north edge of road; chisel mark, painted "U. S. 836 B. M."	835.87
T road north	877.2

	Feet
Klau School, 6.36 miles northwest of, 6.03 miles south of Nacimiento River, 20 feet west of road, 10 feet south of small drain, top of rock; aluminum tablet stamped "1,019, 1917"	1,019.384
Nacimiento River, 4.97 miles south of, at T road northwest to O'Connor ranch, in root of 18-inch live-oak tree; copper nail and washer, painted "U. S. 1,046 B. M."	1,045.66
Nacimiento River, 4.07 miles south of, near small burnt area, rocks on brow of hill near by, 25 feet from road, 5 feet from 36-inch live-oak tree, top of sand rock; chisel mark, painted "U. S. 1,043 B. M."	1,043.15
Entrance to Godfrey ranch; road at gate	908.8
Nacimiento River, 2.95 miles south of, 0.52 mile north of south line of Godfrey ranch, 30 feet south of and about 20 feet above road, 60 feet east of 60-inch live-oak tree, top of rock; aluminum tablet stamped "868 1917"	868.496
Nacimiento River, 1.62 miles south of, on large boulder between road and creek; chisel mark, painted "U. S. 719 B. M."	719.34
Nacimiento River, 0.62 mile south of, at point where road runs between two small hills, 9.5 feet west of 36-inch live-oak tree, top of rock; chisel mark, painted "U. S. 781 B. M."	777.97
Nacimiento River, water level, May 24, 1917	648.70
Nacimiento River, 0.28 mile north of, 400 feet west of G. C. Williams's house, near fence on north side of road, top of rock; aluminum tablet stamped "727 1917"	727.377

Leveled twice. Primary leveling by R. C. Seitz in 1917 and L. F. Biggs in 1918
From Klau School along highway south and west to west border of quadrangle

Summit, about 0.25 mile east of Klau mine	1,248.1
Klau post office, 1.39 miles south of, west side of Dance Hall at Klau mine, top of small rock 4 feet west of tree; chisel mark, painted "U. S. 1,155 B. M."	1,155.57
Klau post office, 2.40 miles south of, about 500 feet north of private road into Carmine ranch, on outer edge of road at sharp bend, on large boulder; aluminum tablet stamped "1,240 1917"	1,239.673
Klau post office, 3.47 miles south of, 0.60 mile below creek crossing, creek skirts road, at base of ledge on east edge of road, on small rock; chisel mark, painted "U. S. 1,357 B. M."	1,356.81
Creek crossing, surface of road	1,564.7
Klau post office, 4.56 miles south of, 0.50 mile above stream crossing, 1.10 miles below summit, on rock on west edge of road; chisel mark, painted "U. S. 1,784 B. M."	1,785.06
Klau post office, 5.56 miles west of; summit of road	2,229.4
Klau post office, 5.66 miles south of, 300 feet west of summit, on large painted rock at north edge of road; aluminum tablet stamped "2,212 1917"	2,209.771
Klau post office, 6.88 miles south of, T road to Templeton, in south angle, 15 feet from road, 7 feet from fence, top of small rock; chisel mark, painted "U. S. 1,655 B. M."	1,658.78
Cambria, 11.57 miles east of, 7.71 miles south of Klau post office, 130 feet east of watering trough, 20 feet north of and 8 feet above road, top of rock; aluminum tablet stamped "1,263 1917"	1,198.035

	Feet
Cambria, 10.57 miles east of, at east side of small drain, 10 feet north of road, top of rock; chisel mark, painted "U. S. 783 B. M."	780.19
Cambria, 9.66 miles east of, 80 feet below ford, 20 feet east of tree blazed (A. T. N. W./XIII A. B. 01 X x), in root of 18-inch alder tree; copper nail and washer, painted "U. S. 585 B. M."	591.56
Cambria, 8.84 miles east of, at southeast corner of Mammoth Rock School yard, 10 feet east of road, on top of small boulder; bronze tablet stamped "527 1917"	533.023
Cambria, 7.79 miles east of, 5 feet east and about 3 feet above road, top of rock; chisel mark, painted "U. S. 441 B. M." (painted erroneously)	456.33
Cambria, 6.75 miles east of, northwest corner of J. L. Marquart's yard, at east edge of road, top of rock; chisel mark, painted "U. S. 352 B. M."	355.34
Cambria, 6.08 miles east of, 450 feet east of Fred Gamman's house, 30 feet north of road, top of boulder; bronze tablet stamped "376 1917"	379.021

ARROYO GRANDE QUADRANGLE

[Latitude 35°–35° 15′; longitude 120° 30′–120° 45′]

SAN LUIS OBISPO COUNTY

Precise leveling by the U. S. Coast and Geodetic Survey in 1919–20

South along Southern Pacific R. R.

	Feet
Edna, 0.5 mile south of, on south end of concrete culvert over Villa Creek first crossing 258–E, west of track; red metal disk (U. S. C. & G. S. b. m. V–25)	203.825
Hadley, 0.4 mile south of, on south abutment of plate-girder bridge 259–E, east of track; red metal disk (U. S. C. & G. S. b. m. W–25) (Geological Survey bench mark here was destroyed by new masonry construction)	159.448
Pismo, at mileage 262.7 opposite railroad steel bridge 262–C, on south end of abutment of steel highway bridge over Villa Creek, east of roadway; a Geological Survey bronze tablet stamped "24 20 1916" (U. S. C. & G. S. b. m. X–25)	24.793
Oceano, opposite station, on southeast concrete pier of large wooden Southern Pacific R. R. water tank; red metal disk (U. S. C. & G. S. b. m. Y–25)	24.829
Oceano, 0.4 mile south of, at mileage 266.4, in south concrete abutment of railroad plate-girder bridge 266–B, east side of track; red metal disk (U. S. C. & G. S. b. m. Z–25) (Geological Survey plate here was destroyed by new masonry construction)	30.128
Oceano, 2.7 miles south of, about 500 feet north of 269 milepost, center of "9" in 1918 on west side of railroad culvert 268–F; surface within an outlined square on masonry (U. S. C. & G. S. b. m. A–26)	82.349
Bromela, mileage 272.4, 400 feet north of station, west end of culvert 272–C; Geological Survey bronze tablet stamped "47 1916" (U. S. C. & G. S. b. m. C–26)	51.338
Bromela, on west end of concrete culvert 272–D; red metal disk (U. S. C. & G. S. b. m. B–26)	52.608

SAN LUIS QUADRANGLE

[Latitude 35°–35° 30′; longitude 120° 30′–121°]

SAN LUIS OBISPO COUNTY

Primary leveling by L. F. Biggs in 1916. Corrected to agree with U. S. C. & G. S. precise leveling over same route

From point near San Luis Obispo south along Southern Pacific R. R. to Guadalupe. Double-rodded line

	Feet
San Luis Obispo, 3.0 miles south of, at base of Imlay Hill, east end of concrete culvert 255–C; chiseled square marked "U. S. 233"	233.57
San Luis Obispo, 3.3 miles south of, near southeast base of Imlay Hill, east end of stone railroad bridge 255–F; bronze tablet stamped "232 18 1916" (U. S. C. & G. S. b. m. U–25)	225.892
Edna, 1.2 miles north of, east end of concrete culvert 255–J; chiseled square marked "U. S. 240"	240.39
Edna, south end of concrete step leading to depot baggage room; chiseled square	232.15
Hadley Tower, 1,500 feet west of, north end of east stone abutment of bridge 259–F; bronze tablet stamped "164 19 1916" (Reported by U. S. C. & G. S. as destroyed by new masonry construction)	164.921
Taber, near east end of switch, southeast of west abutment of undertrack crossing 259–M; chiseled square marked "U. S. 138"	138.30
Pismo, 1.7 miles east of, south end of west stone abutment of bridge 260–H; chiseled square marked "U. S. 78"	78.61
Pismo, 1.3 miles east of, south end of west stone abutment of Villa Creek bridge 261–B; chiseled square marked "U. S. 63"	63.54
Pismo depot, 600 feet north of, east end of south concrete abutment of Villa Creek highway bridge; bronze tablet stamped "24 20 1916" (U. S. C. & G. S. X–25)	24.793
Grover, west end of concrete culvert 264–B, at road crossing; chiseled square marked "U. S. 15"	15.30
Oceano, 1.0 mile north of, west end of concrete culvert 264–D; chiseled square marked "U. S. 18"	19.09
Oceano, 0.5 mile south of, east end of concrete abutment of Arroyo Grande River bridge 266–B; bronze tablet stamped "29 21 1916" (Reported by U. S. C. & G. S. as destroyed by new masonry construction)	29.944
Oceano, 2.0 miles south of, east end of south abutment of undertrack crossing 267–K; chiseled square marked "U. S. 33"	34.23
Callender, 1.0 mile north of, 100 feet south of railroad crossing, east end of culvert 268–F; chiseled square marked "U. S. 79"	82.44
Callender, south end of switch, base of semaphore 270–I; chiseled square marked "U. S. 103"	106.48
Road crossing 270–D. E.; top of rail	72.3
Bromela, 400 feet north of station, west end of culvert 272–C; bronze tablet stamped "47 1916" (U. S. C. & G. S. C–26)	51.338

Primary leveling by Gerald Fitz Gerald in 1919

From Pismo east along highways into Nipomo quadrangle

Pismo depot, 600 feet north of, east end of south abutment of Villa Creek bridge; bronze tablet stamped "24"	24.793

	Feet
Pismo, 1 mile east of, 300 feet north of farmhouse, north side of road, panel gate, in center of concrete highway stake; nail	45.07
Pismo, 2.3 miles east of, at summit of hill, south side of road, 2 feet south of panel gate, in wooden highway stake; copper nail and washer, "U. S. 182 B. M." painted on fence	183.15
Arroyo Grande Bank, on south side of doorstep; bronze tablet stamped "119"	119.643
Arroyo Grande, 1.5 miles east of, 100 feet south of deserted house, at road forks, on fence line at west side of road, in root of large live-oak tree; copper nail and washer scribed "159"	159.47
Arroyo Grande, 2.9 miles east of wooden bridge, on 12 by 14 inch main brace, 20 feet from south end; copper nail and washer, "187" scribed on rail, "U. S. 187 B. M." painted on rail	187.81
Arroyo Grande, 4.4 miles east of T road, south side of road, on top of corner fence post; copper nail and washer, "U. S. 339 B. M." painted, "339" scribed	339.90
Arroyo Grande, 4.7 miles east of, at turn in road, on floor at south end of wooden bridge; copper nail and washer, "U. S. 311 B. M." painted on rail	311.82

AVENAL QUADRANGLE

[Latitude 35°–35° 15′; longitude 120°–120° 15′]

SAN LUIS OBISPO AND SANTA BARBARA COUNTIES

Primary leveling by H. S. Crowe in 1901

From east border of quadrangle west along road down Cuyama River to west border

	Feet
Wasioja post office, 12.1 miles northwest of, 15 feet north of wagon road, 500 feet east of wash on flat; iron post stamped "1,415 L. A." (B. M. 38)	1,418.285
Wasioja post office, 13.1 miles northwest of, on burr-oak tree, 20 inches in diameter, 60 feet north of road, at small canyon; one-half inch carriage bolt (B. M. 39)	1,398.60
Wasioja post office, 15.2 miles northwest of, 25 feet north of road, between two small canyons, on notch cut on burr-oak tree 48 inches in diameter; 20-penny wire nail (B. M. 40)	1,347.32
Wasioja post office, 16.2 miles northwest of, on north edge of road, at foot of sandstone bluff, on sandstone boulder 14 by 30 inches; 6-penny wire nail in top (B. M. 41)	1,315.94
Wasioja post office, 17.3 miles northwest of, on west line of Rancho Cuyama No. 1, 3 feet north of north fence post of gate in fence, 10 feet north of center of road; iron post stamped "1,289 L. A." (B. M. 42)	1,292.212
Wasioja post office, 18.4 miles northwest of, on south side of road, 100 feet north of rock bluff, on notch cut on stump of live-oak tree 8 inches in diameter; 20-penny wire nail (B. M. 43)	1,266.49
Wasioja post office, 19.3 miles northwest of, in SW. ¼ SW. ¼ sec. 30, T. 32 S., R. 18 E., 25 feet south of road, on notch cut on live-oak tree 24 inches in diameter; 20-penny wire nail (B. M. 44)	1,244.36
Wasioja post office, 20.9 miles northwest of, 50 feet south of road, at foot of rock bluff, on notch cut on cottonwood tree 36 inches in diameter; 20-penny wire nail (B. M. 45)	1.189.31

	Feet
Wasioja post office, 22 miles northwest of, on south edge of road, at turn of road to south, on cottonwood tree 36 inches in diameter; spike with hook on end (B M. 46)	1,158.93
Wasioja post office, 23 miles northwest of, at point of big bend in river near Treat ranch on knob on top of rock 10 by 12 by 15 feet in bed of river; chiseled circle on top of rock (B. M. 47)	1,120.13
Wasioja post office, 24.1 miles northwest of, 70 feet east of road; on notch cut on live-oak tree 18 inches in diameter, 20-penny wire nail (B. M. 48)	1,102.67
Wasioja post office, 25.3 miles northwest of, at jog in fence, 15 feet northeast of gate to Whaley ranch house, 2.4 feet west of corner post of fence; iron post stamped "1,091 L. A." (B. M. 49)	1,094.883
Wasioja post office, 26.9 miles northwest of, on south side of road, on grade, on notch cut on burr-oak tree 36 inches in diameter; 20-penny wire nail (B. M. 50)	1,017.07
Wasioja post office, 28.0 miles west of, on south edge of road, on long grade, on notch cut on burr-oak tree 30 inches in diameter; 20-penny wire nail (B. M. 51)	1,323.62
Center of wagon road, on divide	1,386.8
Wasioja post office, 28.2 miles west of, 25 feet west of road, at summit of first divide; on notch cut on burr-oak tree 30 inches in diameter; 20-penny wire nail (B. M. 52)	1,388.28
Wasioja post office, 29.0 miles west of, on east edge of road, on long grade, on notch cut on burr-oak tree, 36 inches in diameter; 20-penny wire nail (B. M. 53)	1,267.06
Wasioja post office, 30.1 miles west of, on west side of road, on small flat, on notch cut on burr-oak tree 36 inches in diameter; 20-penny wire nail (B. M. 54)	1,452.58
Summit of pass; center of wagon road	1,435.6
Wasioja post office, 30.8 miles west of, on saddle where steep grade starts to go down to river, 0.25 mile south of summit, 25 feet east of wagon road; iron post stamped "1,474 L. A." (B. M. 55)	1,477.060
Wasioja post office, 31.6 miles west of, on south side of road, 40 feet southwest of spring, on notch cut on white-oak tree 24 inches in diameter; 20-penny wire nail (B. M. 56)	1,185.72
Wasioja post office, 32.5 miles west of, 30 feet south of road, at foot of grade, at mouth of Aliso Canyon, on notch cut on live-oak tree 36 inches in diameter; 6-penny wire nail (B. M. 57)	844.08
Center of road, opposite mouth of Pine Canyon	819.9
Wasioja post office, 33.6 miles west of, 65 feet south of road, at foot of slope from cultivated field of H. Dutard, on notch cut on willow tree 24 inches in diameter; 6-penny wire nail (B. M. 58)	808.18
Intersection with road to Dutard ranch house (this road goes to Los Olivos via Tuguaget Canyon)	795.8
Wasioja post office, 34.7 miles west of, on bench, 80 feet south of road, 25 feet north of fence line, on notch cut on cottonwood tree 36 inches in diameter; 20-penny wire nail	777.40
Center of road at gate, in fence across road (line between Suey ranch and Dutard ranch)	762.3
Wasioja post office, 36.0 miles west of, 75 feet north of road, on notch cut on cottonwood tree, 48 inches in diameter, 20-penny wire nail (B. M. 60)	739.52

Primary leveling by Gerald Fitz Gerald in 1919

From northwest corner of Avenal quadrangle southeast and east across north part of quadrangle to McKittrick quadrangle near Hathaway Wells

	Feet
Pozo, 10.9 miles east of, north of sharp turn in river, south bank, northwest side of road, in root of live-oak tree; copper nail, triangle scribed "1,672"	1,674.37
Pozo, 12.1 miles east of, creek forks, north side of road, in root of large white-oak tree; copper nail, triangle scribed "U. S. 1,740"	1,742.26
Pozo, 13.5 miles east of, half way between creek crossings, 100 feet from each, 30 feet north of road, in large white-oak tree; copper nail on root, triangle on tree scribed "U. S. 1,818"	1,819.98
Pozo, 13.7 miles east of, at road forks, 30 feet north of panel gate, in fence corner; iron post stamped "1,865"	1,867.161
Pozo, 14.1 miles east of, at foot of grade, north side of road, in root of large white-oak tree; copper nail, triangle scribed "U. S. 1,798"	1,800.69
Pozo, 14.9 miles east of, 200 feet west of branding corral, 40 feet from old adobe ruins, 200 feet southwest of road, in root of large white-oak tree; copper nail, triangle scribed "U. S. 1,725"	1,727.19
Avenal ranch house, 450 feet south of, south bank of creek, in large sandstone boulder; bronze tablet stamped "1,616"	1,618.376
Avenal ranch, 1.2 miles east of, creek forks, 50 feet south of old road, in root of white-oak tree; nail, triangle scribed "U. S. 1,811"	1,811.28
Avenal ranch, 2.3 miles east of, old road crosses saddle 40 feet west of road, in root of large white-oak tree; nail, triangle scribed "U. S. 2,096 B. M."	2,096.43
Avenal ranch, 3.5 miles east of, 10 feet north of trail, in bottom of telephone pole scribed "U. S. 2,177 B. M."; nail	2,177.39
Buckhorn ranch, 3 miles southwest of, 10 feet east of trail, in bottom of telephone pole; wire nail, "U. S. 3,003. B. M." on pole	3,003.96
Buckhorn ranch, 2.5 miles south of, at summit of mountain, 20 feet north of trail, 8 feet north of large white-oak tree, with triangle scribed "U. S. 3,455" in boulder; bronze tablet stamped "3,455"	3,456.165
Buckhorn ranch, 1 mile south of, at edge of brush on mountain, 15 feet south of trail, in root of white-oak tree; wire nail, triangle scribed "U. S. 2,284" on tree	2,284.53
Buckhorn ranch, 0.33 mile northeast of, at summit of hill, north side of road, 30 feet from road, in sandstone rock; bronze tablet stamped "2,140"	2,140.552
Carisa ranch, 2.8 miles west of, 1.2 miles east of Buckhorn ranch, 400 feet south of old fireplace, north bank of creek, in root of large white-oak tree; nail, triangle scribed "U. S. 1,861" on tree	1,861.22
Carisa ranch, 1.8 miles west of, 2.2 miles northeast of Buckhorn ranch, north of Carisa Creek, 100 feet east of San Juan River, south bank of creek, in top of post; wire nail, "U. S. 1,794 B. M." scribed on post	1,794.35
Carisa ranch house, 2,000 feet west of, 100 feet north of creek road, in sandstone ledge; aluminum tablet stamped "1,883"	1,884.121
Carisa ranch house, 0.3 mile east of, south side of panel gate, in post brace, scribed "U. S. 1,929" on post; nail	1,929.89
Goodwin ranch, 6.5 miles west of, creek bottom 200 feet west of where fence crosses Carisa Creek, 40 feet west of wire gate; wire nail in cedar fence post marked "U. S. 2,009 B. M."	2,009.80

Feet

Goodwin ranch, 5.8 miles south of, at spring, east tree of six, in root; wire nail, triangle on tree scribed "2,068 U. S."---------- 2,068.83

From Nipomo quadrangle near Lanes east along highway to point near Avenal ranch

Huasna, 11 miles east of, 100 feet west of road forks, 20 feet west of road, in root of large white-oak tree; nail, triangle on tree, scribed "1,737"---------- 1,739.81

Huasna, 12.7 miles east of, on top of mountain, 40 feet east of creek, in root of small white-oak tree; nail and washer, "U. S. 2,187" painted on tree---------- 2,190.43

Huasna, 13.4 miles northeast of, near summit, in root of large white-oak tree, 40 feet west of road; nail, triangle painted "U. S. 2,525 B. M."---------- 2,528.61

Huasna, 14.5 miles northeast of, road forks, 20 feet north of; chiseled and painted square on rock, painted "U. S. 2,521"---------- 2,524.63

Huasna, 15.7 miles northeast of, 0.66 mile from p. b. m. east side of road, in root of small white-oak tree; nail and washer, painted "U. S. 2,056"---------- 2,059.50

Huasna, 16.57 miles northeast of, near panel gate, at road forks; iron post stamped "1,865"---------- 1,867.161

BRADLEY QUADRANGLE

[Latitude 35° 45′–36°; longitude 120° 45′–121°]

MONTEREY AND SAN LUIS OBISPO COUNTIES

Precise leveling by the U. S. Coast and Geodetic Survey in 1919

Southeast along Southern Pacific R. R.

Feet

San Ardo, 5.4 miles southeast of, east head wall of cast-iron pipe culvert 188–B, 4 meters east of center line of track, railroad mileage 188.3; red metal disk (U. S. C. & G. S. b. m. G–23)---- 487.702

San Ardo, 6.5 miles southeast of, in base of target 1895, railroad mileage 189.5; Geological Survey bronze tablet stamped (U. S. C. & G. S. b. m. H–23)---------- 492.945

Bradley, 4.7 miles northwest of, railroad mileage 191.2, in east end of north stone abutment of bridge 191–C, 4 meters east of center line of track; red metal disk (U. S. C. & G. S. b. m. I–23)------- 492.801

Bradley, 4 miles northwest of, railroad mileage 191.9, in west end of north stone abutment of bridge 191–E, 3 meters west of center line of track; surface within an outlined square on horizontal masonry or metal (U. S. C. & G. S. b. m. J–23)---------- 496.820

Bradley, 2.4 miles northwest of, railroad mileage 193.5, center of "6" in "1916," west head wall of concrete culvert 193–D, 3 meters west of center line of track, surface within an outlined square on masonry or metal (U. S. C. & G. S. b. m. K–23)---------- 505.193

Bradley, 0.8 mile north of, railroad mileage 195.1, center of "9" in "1916," east head wall of concrete box culvert 195–A, 3 meters east of track, 5 meters below, surface within an outlined square on horizontal masonry or metal (U. S. C. & G. S. b. m. L–23)---- 525.281

	Feet
Bradley, north edge of town, railroad mileage 195.9, in corner of line fence, 20 feet west of railroad, 1,000 feet north of grain shed, Geological Survey aluminum or bronze tablet set on iron post (U. S. C. & G. S. b. m. M–23)	540.842
Bradley, 1.1 miles south of, railroad mileage 197.1, west end of north abutment of concrete culvert 197–A, 4 meters west of center line of track, 1.5 meters below; red metal disk (U. S. C. & G. S. b. m. N–23)	548.549
Bradley, 1.8 miles southeast of, railroad mileage 197.8, east end of north abutment of concrete culvert 197–E, 3 meters east of center line of track, 5 meters below, surface within an outlined square on horizontal masonry or metal (U. S. C. & G. S. b. m. O–23)	550.370
Bradley, 2.8 miles southeast of, railroad mileage 198.7, south end of east stone abutment of culvert 198–A; chiseled square, marked "U. S." (U. S. C. & G. S. b. m. P–23)	546.751

Primary leveling by L. F. Biggs in 1916. Corrected to agree with U. S. Coast and Geodetic Survey precise leveling of 1920 along same route

From Bradley southeast along Southern Pacific R. R. to point near San Miguel (double-rodded line)

Bradley, south edge of town, in corner of fence, 200 feet south of red section house; iron post stamped "552"	552.693
Bradley, 1.0 mile southeast of, on west abutment of concrete undertrack crossing 197–A; chiseled square, marked "U. S. 548" (U. S. C. & G. S. N–23)	548.55
Bradley, 2.8 miles southeast of, on south end of east stone abutment of culvert 198–A; chiseled square, marked "U. S. 546" (U. S. C. & G. S. P–23)	546.75
Bradley, 3.7 miles southeast of, on south end of east abutment of concrete culvert 199–B; chiseled square, marked "U. S. 549"	549.20
Bradley, 5.2 miles southeast of, on east end of north abutment of steel railroad bridge 200–B over Salina River; bronze tablet stamped "565 1 1916" (U. S. C. & G. S. Q–23)	565.189
Nacimiento, west end of concrete culvert 201–B; chiseled square, marked "U. S. 579"	579.16

Primary leveling by R. C. Seitz in 1917

From south border of quadrangle northwest along highway to Pleyto

Nacimiento River, 1.50 miles north of, southwest corner of box culvert; copper nail and washer, painted "U. S. 824 B. M."	824.99
Nacimiento River, 2.16 miles north of, 1 mile south of Bee Rock School, 15 feet east of road, 0.28 mile south of summit of road, on rock 4 feet north of drain; chiseled mark, painted "U. S. 1,030 B. M."	1,030.40
Summit of road	1,146.2
Nacimiento River, 4.04 miles north of, 200 feet west of Bee Rock School, 100 feet east of road, on rock; aluminum tablet stamped "1,000 1917"	999.685
Floor of bridge at forks of road at Bee Rock Hall, painted "926.6"	920.6
Bee Rock Hall, 0.39 mile west of, on large boulder on south side of road near west end of rock cliff; chiseled mark, painted "U. S. 996 B. M."	995.76

	Feet
Bee Rock Hall, 1.66 miles west of, 6.08 miles south of Pleyto, northwest corner of floor of wooden bridge; copper nail and washer, painted "U. S. 1,121 B. M."	1,121.34
Pleyto, 5.19 miles south of, east end of small box culvert across road, at bend about 300 feet northeast of Edmond's house; copper nail and washer, painted "U. S. 1,141 B. M."	1,146.94
Pleyto, 3.87 miles south of, 1,300 feet north of wooden truss bridge, 20 feet east of road, top of large boulder; bronze tablet stamped "880 1917"	885.426
Pleyto, 2.76 miles south of, 150 feet west of divide, in base of brace to corner fence post; copper nail and washer, painted "U. S. 1,102 B. M."	1,107.73
Pleyto, 2.09 miles south of, 200 feet east of divide, top of rock, 30 feet north of south end of rock outcrop; chiseled mark, painted "U. S. 1,054 B. M."	1,059.96
Pleyto, 1.09 miles south of, where drain crosses road at bend, in root of 18-inch live oak tree, 40 feet west of road; copper nail and washer, painted "U. S. 783 B. M."	788.99
Pleyto, center of road, at forks, on red cobblestone; chiseled mark, painted "U. S. 722 B. M."	722.40

From Pleyto north to point 12.1 miles southeast of Jolon

Pleyto, 0.29 mile north of, top of first pier from south end of east side of river bridge; aluminum tablet stamped "725 1917"	725.349
Pleyto, 1.18 miles north of, 625 feet south of well in field, in root of 60-inch scrub-oak tree; copper nail and washer, painted "U. S. 807 B. M."	807.46
Pleyto, 2.23 miles north of, east edge of road opposite old dilapidated house, on rock; chiseled mark, painted "U. S. 892 B. M."	892.21
Pleyto, 3.15 miles north of, Jolon 12.1 miles southeast of, at base of hill, on west side of road, in telephone pole; spike, with aluminum tag stamped "1,008"	1,008.60

Primary leveling by W. O. Monahan in 1908

From point 3 miles southeast of San Ardo southeast along railroad to Bradley, thence northeast along highways

San Ardo, 4.3 miles southeast of, east of railroad, in telegraph pole; spike with aluminum tag stamped "461"	460.90
San Ardo, 5.2 miles southeast of, east of railroad, in telegraph pole; spike with aluminum tag stamped "491"	490.77
San Ardo, 6.5 miles southeast of, in base of target 1897; aluminum tablet stamped "1908—493—B" (C. & G. S. b. m. H_{23})	492.945
San Ardo, 7.3 miles southeast of, west of railroad, in telegraph pole; spike with aluminum tag stamped "501"	500.78
San Ardo, 8.21 miles southeast of, in foundation of relay post; spike with aluminum tag stamped "493"	492.49
San Ardo, 9.2 miles southeast of, west of track, 100 feet from river bank, in telegraph pole; spike with aluminum tag stamped "507"	506.39
San Ardo, 10.1 miles southeast of, in stone culvert under railroad; aluminum tablet stamped "504—B—1908"	503.771
San Ardo, 11.35 miles southeast of, on west side of railroad, in telegraph pole; spike with aluminum tag stamped "518"	517.65
San Ardo, 12.2 miles southeast of, east of railroad, in telegraph pole; spike with aluminum tag stamped "525"	524.94

	Feet
Bradley, north edge of town, in corner of line fence, 20 feet west of railroad, 1,000 feet north of grain shed; iron post stamped "CAL–1908–541–B" (U. S. C. & G. S. b. m. M 23)	540.842
Bradley, in front of station; top of rail marked "545"	545.5
Bradley, south edge of town, in corner of fence, 200 feet south of red section house; iron post stamped "552"	552.693
Bradley, 2.8 miles east of, north of road, in base of large oak tree; spike with aluminum tag stamped "743"	744.05

From Bradley west along highway 9 miles

San Ardo, 11.4 miles southeast of, west of railroad, in telegraph pole; spike with aluminum tag stamped "517"	517.65
Jolon, 21.8 miles southeast of, in barnyard of Ed Porter ranch, in large oak tree; spike with aluminum tag stamped "498"	498.81
Jolon, 20.9 miles southeast of, north of road, in telephone pole; spike with aluminum tag stamped "550"	550.74
Jolon, 19.9 miles southeast of, west of road, under large oak tree, 1,000 feet south of ranch house on east; iron post stamped "1908–CAL–597–B"	597.51
Jolon, 18.9 miles southeast of, west of road, 1,000 feet south of white patent wire gate leading to ranch on west, in telephone pole; spike with aluminum tag stamped "632"	632.87
Jolon, 17.2 miles southeast of, east of road, north of white barn at top of grade, in telephone pole; spike with aluminum tag stamped "742"	742.82
Jolon, 16.3 miles southeast of, east of road in angle, in telephone pole; spike with aluminum tag stamped "767"	767.41
Jolon, 12.1 miles southeast of, at base of hill, on west side of road, in telephone pole; spike with aluminum tag stamped "1008"	1,008.60
Jolon, 13 miles southeast of, east of road at summit of hill, in automobile danger signpost; spike with aluminum tag stamped "1121"	1,121.76
Jolon, 14 miles southeast of, west of road where road bends to east, in base of telephone pole; spike with aluminum tag stamped "971"	971.33
Jolon, 15.1 miles southeast of, west of road under small oak tree, 10 feet west of road; iron post stamped "1908–CAL–852–B"	853.997

CAYUCOS QUADRANGLE

[Latitude 35° 15′–35° 30′; longitude 120° 45′–121°]

SAN LUIS OBISPO COUNTY

Primary leveling by L. F. Biggs in 1916

From point 6.5 miles northwest of San Luis Obispo northwest along highways to Cayucos. (Leveled twice)

NOTE.—On account of the large discrepancy of 0.48 foot between this line and gage difference of elevation Morro to Cayucos the line was not adjusted to fit either but a mean correction was taken from the two gages.

	Feet
San Luis Obispo, 8.0 miles northwest of, north end of concrete highway bridge, at Charley Walter's ranch house; bronze tablet stamped "133 23 1916"	133.330

	Feet
San Luis Obispo, 9.6 miles northwest of, west end of concrete bridge, opposite Banning School; chiseled square, marked "U. S. 104"	104.43
San Luis Obispo, 10.8 miles northwest of, north abutment of stone bridge over San Bernardo Creek; bronze tablet stamped "57 24 1916"	57.948
Cayucos, 7.0 miles south of, at forks of road to Morro, in base of corner fence post; spike	131.05
Morro, northwest corner of school yard, in concrete pier; bronze tablet (U. S. C. & G. S. b. m. 3 Elevation, given as 72.51 in letter of March 3, 1917, from Director of U. S. C. & G. S., determined by simultaneous comparison in 1916 with San Francisco)	72.726
Cayucos, 6.0 miles south of, northwest corner of bridge opposite Morro Rock; top of bolt, painted "U. S. B. M."	28.43
Cayucos 4.5 miles south of, west end of bridge; top of nail painted	35.89
Atascadero, on west end of concrete culvert; kiel mark (U. S. C. E. b. m. 42.12)	40.30
Cayucos, 3.0 miles south of, concrete bridge over Toro Creek, in south end of east railing; bronze tablet stamped "20 25 1916"	19.767
Cayucos, 1.2 miles south of, concrete bridge over creek at I. O. O. F. cemetery, top of northeast pier; chiseled square, marked "U. S. B. M."	24.63
Cayucos, bridge over creek in southeast part of town; top of concrete rail (U. S. C. & G. S. b. m. 4. Elevation 19.82)	19.495
Cayucos, east side of Main St., in concrete building of Tognini & Ghezzi's general store at south side of door leading to second story, in door sill (U. S. C. & G. S. b. m 2. Elevation 17.59) established in 1916	17.298
Cayucos, main building of Central Creamery, southeast corner, 24 feet above foundation; tablet (U. S. C. & G. S. b. m. 1)	34.209

NOTE.—The elevation of this bench mark as determined by the U. S. C. & G. S. from two days' simultaneous comparisons in 1916 is 34.42, based upon 72.51 feet for bench mark 3, at Morro. See letter from U. S. C. & G. S., dated March 3, 1917. The value used, 34.209, is derived by Biggs's mean line corrected by a constant so as to close +0.212 at Morro and —0.211 at Cayucos.

Primary leveling by R. C. Seitz in 1917 and by L. F. Biggs in 1918

From Cayucos northwest along highways to San Simeon quadrangle. (Leveled twice)

Cayucos, southeast part of town; top of concrete rail of bridge over creek (U. S. C. & G. S. b. m. 4. Elevation 19.82)	19.495

NOTE.—Value used, 19.495, was determined by Biggs's mean line with an average correction from Morro and Cayncos.

Cayucos, southeast corner of Central Creamery main building, 24 inches above foundation; brass tablet (U. S. C. & G. S. b. m. 1. Elevation 34.47 or 34.42 by two days' water comparison with Morro)	34.209

NOTE.—Value used, 34.209, was determined by Biggs's mean line with an average correction from Morro and Cayncos.

	Feet
Cayucos, 1.23 miles northwest of, northeast of deserted cabin on coast, at west end of box culvert; copper nail and washer, painted "U. S. 57 B. M."	58.11
Cayucos, 2.31 miles northwest of, on large boulder at bend of road, 15 feet east of road and on south side of most northerly pile of rocks; chiseled mark, painted "U. S. 61 B. M."	61.40
Cayucos, 3.59 miles northwest of, one mark on large box culvert across road, another mark on top of low fence post, on south side of road, opposite box culvert; two copper nails and washers, painted "U. S. 34 B. M."	34.19
Cayucos, 4.54 miles northwest of, 0.20 mile south of Villa Creek, 15 feet east and about 20 feet above road, on rock ledge; bronze tablet stamped "65 1917."	65.024
Cayucos, 5.79 miles northwest of, near house, northeast corner of plank culvert; copper nail and washer, painted "U. S. 64 B. M."	64.35
Cayucos, 7.03 miles northwest of, 7.41 miles southeast of Cambria, at northwest corner of small wooden bridge, top of stone retaining wall; chiseled mark painted "149 U. S. B. M."	149.04

CHOLAME QUADRANGLE

[Latitude 35° 30′–36°; longitude 120°–120° 30′]

FRESNO, KERN, KINGS, MONTEREY, AND SAN LUIS OBISPO COUNTIES

Primary leveling by L. F. Biggs in 1908

From point 7.6 miles southwest of Somner's ranch to Somner's ranch

	Feet
Somner's ranch, 4.3 miles southwest of, west of road, on summit between Simmler and Somner's ranch; iron post stamped "2347" B 1908 23 B"	2,347.518
Somner's ranch, 1,000 feet east of house, on east bank of wash, in top of boulder; aluminum tablet stamped "1637 B 1908 24 B"	1,637.560

From point 4.4 miles southeast of Orchard's well northwest via Dudley to Jones ranch

Orchard's well, 1.2 miles southeast of, 2,000 feet north of derrick, at junction of roads; iron post stamped "652 B 1908 41 B"	651.748
Orchard's well, 1.4 miles northwest of, 3.8 miles southwest of Dudley, west of road, at junction; iron post stamped "613 B 1908 42 B"	613.350
Dudley, 1.5 miles south of, east of road, at junction; iron post stamped "655 B 1908 43 B"	655.539
Dudley, 0.4 mile north of, at crossroads, 5 feet north of section corner; iron post stamped "685 B 1908 44 B"	685.729
Dudley, 3.9 miles north of, east of road; iron post stamped "535 B 1908 45 B." (Reported to have been disturbed, in letter from R. J. Reed, dated Oct. 24, 1910)	535.435
Dudley, 6.6 miles north of, east of road; iron post stamped "572 B 1908 B 46." (Reported to have been disturbed, in letter from R. J. Reed, dated Oct. 24, 1910)	571.952

	Feet
Anderson oil well, 1.8 miles southeast of, 0.5 mile north of cabin, at junction of roads, east of road; iron post stamped "666 B 1908 47 B"	665.608
Anderson oil well, 0.3 mile northwest of, south of road; iron post stamped "872 B 1908 48 B"	872.627
Jones ranch, 4.3 miles southeast of, 0.4 mile north of ranch house, west of road, 100 feet north of junction; iron post stamped "1171 B 1908 49 B"	1,171.107
Jones ranch, 1.6 miles southeast of, east of road; point on rock painted "1047 B. M. 109"	1,046.75
Jones ranch, 500 feet west of house, at fence corner; iron post stamped "1062 B 1908 50 B"	1,061.593

Primary leveling by R. C. Seitz in 1917

From west border along highways northeast to Parkfield, thence west to west border

Parkfield, 6.96 miles south of, 20 feet south of creek where road crosses creek the last time before ascending to summit, in white rock 100 feet west of road; bronze tablet stamped "1,834 1917"	1,837.672
Parkfield, 5.96 miles south of, in fence corner, opposite upper end of split in road, in base of 18-inch oak tree; spike, painted "U. S. 2,247 B. M."	2,249.82
Parkfield, 5.09 miles southwest of, in gap at summit, 30 feet east of road; iron post stamped "2,510 1917"	2,509.722
Parkfield, 4.0 miles southwest of, on east edge of road, in root of 14-inch oak tree; roofing nail, painted "U. S. 2,138 B. M."	2,137.33
Parkfield, 3.14 miles southwest of, in base of spliced telephone pole, on north side of road; spike, painted "U. S. 1,893 B. M."	1,892.96
Parkfield, 2.30 miles southwest of, at south end of small box culvert across road, top of plank; roofing nail, painted "U. S. 1,656 B. M."	1,659.03
Parkfield, 2.00 miles (by road) southwest of, at west end of straight stretch of road, at point where road starts to summit, near north fence; iron post stamped "1,525 1917"	1,525.120
Parkfield, 1.10 miles (by road) west of, on south side of road, 500 feet west of Emma S. King's house, in base of telephone pole; spike, painted "U. S. 1,537 B. M."	1,539.58
Parkfield, 2.00 miles west of, on north side of road, opposite C. P. Gould's house (Oak Spring stock farm), in base of fencepost; spike, painted "U. S. 1,633 B. M."	1,636.10
Parkfield, 3.03 miles west of, on south side of road, at bend just west of small cabin, 40 feet east of drain, on 5-inch stove pipe filled with concrete; bronze tablet, stamped "1,776 1917"	1,776.589
Parkfield, 4.10 miles west of, 400 feet west of 60-inch oak tree that stands in center of roadway, in base of telephone pole; spike painted "U. S. 1,818 B. M."	1,823.60
Parkfield, 4.6 miles west of, at Innesdale ranch, at base of gate; top of rock	1,847.14

Primary leveling by Gerald Fitz Gerald in 1919

From point north of Cammatti ranch in Pozo quadrangle along highways north and west into Paso Robles quadrangle

	Feet
NOTE.—This is part of an unadjusted line from Cammatti ranch closed 2.213 feet low upon adjusted elevation 2 miles northeast of Union. Low line should be releveled.	
Shandon, 13.1 miles southeast of, 2.2 miles southeast of Canyon ranch, 20 feet west of road, in top of quarter-section stake, painted "1,284 U. S. B. M."; nail	1,285.230
Shandon, 11.7 miles southeast of, house and windmill, on northeast corner of concrete water tank, painted "U. S. 1,257 B. M."; chiseled square	1,258.351
Canyon ranch house, in center of yard, 300 feet north of house, in southeast corner of concrete trough; aluminum tablet stamped "1,218"	1,219.145
Shandon, 9.4 miles southeast of, 1 mile west of Canyon ranch, panel gate, on west post brace; copper nail, "U. S. 1,197 B. M." painted on gate	1,198.017
Shandon, 8.3 miles southeast of, 2.3 miles northwest of Canyon ranch, in grove of trees, east side of road, in root of tree, "1,159" painted on tree; nail	1,160.680
Shandon, 6.9 miles east of, at ranch house, in northeast corner of barn, in concrete foundation; aluminum tablet stamped "1,152"	1,153.227
Shandon, 3.9 miles east of, in front of Alliance schoolhouse, northwest corner of water trough, in top of frame, "U. S. 1,128 B. M." painted on frame; nail	1,129.576
Shandon, 3.3 miles east of, at sharp turn in road, fence corner, in post brace, painted "U. S. 1,121 B. M."; nail	1,123.049
Shandon, 2 miles east of, in brace at southeast corner of wooden bridge, nail, painted "U. S. 1,101"	1,102.237
Shandon, 0.9 mile east of, crossroads, in southeast corner post, on post brace, rail painted "U. S. 1,038 B. M."; nail	1,039.583
Shandon, east edge of town, in southeast concrete abutment of steel bridge; aluminum tablet stamped "1,023"	1,024.653
Shandon, 1.1 miles west of, at summit of small grade; nail in post, scribed "1,049 U. S."	1,050.499
Shandon, 2.1 miles west of, T road, 1,200 feet northwest of river crossing, 50 feet south of highway, 10 feet north of pole; iron post stamped "995"	996.589
Shandon, 3.3 miles west of, at farmhouse, red gate, south side of road, in post brace; nail; "U. S. 998 B. M." painted on gate	999.303
Shandon, 4.2 miles west of, panel gate, south side of road; nail in brace, "U. S. 970 B. M." painted on gate	970.931
Shandon, 5.1 miles west of, 200 feet west of water trough, in fence corner; iron post stamped "959"	959.988
Shandon, 6.5 miles west of, at summit of hill, panel gate, nail in post brace, "U. S. 1,045 B. M." painted on gate	1,046.295
Shandon, 7.4 miles west of, on hill top, 300 feet east of bend in road; nail in pole	972.435

LA PANZA QUADRANGLE

[Latitude 35° 15′–35° 30′; longitude 120°–120° 15′]

SAN LUIS OBISPO COUNTY

Primary leveling by L. F. Biggs in 1908

From Simmler northwest to point 7.6 miles southwest of Somner's ranch

	Feet
Simmler, 4.7 miles northwest of, 20 feet west of well at fence corner; iron post stamped "2040 B 1908 21 B"	2,040.28
Simmler, 8.9 miles northwest of, southwest corner of sec. 35, T. 28 N., R. 17 E., 1 mile north of house with red roof; iron post stamped "2094 B 1908 22 B"	2,094.440

Primary leveling by N. E. Ballmer in 1918

From Pozo quadrangle east along highways to Simmler quadrangle

La Panza, 0.99 mile west of, 400 feet east of creek crossing, on north side of road, in base of oak tree; spike, "U. S. B. M. 2,127" painted on oak tree	2,128.48
La Panza post office, 500 feet east of, on south side of road, 8 feet from watering trough on rock; chiseled square, "U. S. B. M. 1,874" painted on big oak tree	1,876.14
La Panza post office, 500 feet east of, south side of road, 8 feet from watering trough; aluminum tablet stamped "1,874"	1,876.267
La Panza, 0.96 mile east of, 750 feet west of second-class road turning north, on south side of road, on rock; chiseled square, "U. S. B. M. 1,706" painted on fence post	1,708.02
La Panza, 1.98 miles east of, 110 feet south of road, 600 feet west of square turn to north, in base of big white-oak tree; spike, "U. S. B. M. 1,640" painted on big white-oak tree	1,642.09
La Panza, 3.06 miles east of, 0.54 mile west of La Panza ranch gate, 80 feet north of road, in base of big white-oak tree; spike; "U. S. B. M. 1,582" painted on big white-oak tree	1,583.43
La Panza, 3.57 miles east of, opposite gate to La Panza ranch, in center of road; "U. S. B. M." painted on gate	1,542.74
La Panza, 4.20 miles east of, on north side of road, in brace of fence post; spike, "U. S. B. M. 1,510" painted on fence post	1,511.63
La Panza, 4.68 miles east of, 66 feet west of bridge crossing San Juan River, on south side of road; 3-inch iron post stamped "A. T. Co. El. 1,482 Sta. 2652" iron post stamped "1477"; "U. S. B. M. 1,478" painted on fence post	1,479.413
La Panza, 5.76 miles east of, 1.08 miles east of San Juan bridge, on south side of road, in base of small juniper tree; spike, "U. S. B. M. 1,738" painted	1,739.65
La Panza, 6.78 miles east of, 100 feet west of highway sign, on south side of road, in small juniper tree; spike, painted "U. S. B. M. 1,891"	1,893.37
La Panza, 7.89 miles east of, 7.20 miles west of Simmler, 100 feet north of summit of road, in top of sawed-off post; spike, "U. S. B. M. 2,100" painted on fence post	2,102.02

	Feet
La Panza, 7.89 miles east of, 7.20 miles west of Simmler, north side of road at summit, 60 feet from t. b. m. on post; iron post stamped "2,100"	2,101.866
Simmler, 6.42 miles west of, at second-class road north, in center of road; "2,046" painted on fence post	2,048.02
Simmler, 6.09 miles west of, 500 feet east of highway sign, on north side of road, in base of fence post; spike, painted "U. S. B. M. 2,032"	2,033.68
Simmler, 5.63 miles west of, at angle in fence, on north side of road, in corner post; spike, painted "U. S. B. M. 2,020"	2,021.76
Simmler, 4.40 miles west of, 0.40 mile west of T road north, 100 feet south of road; 1½-inch iron rod 1½ feet long, buried 6 inches, a 2-foot square of sod removed, pile of earth with tin can in center over point	2,018.74
Simmler, 3.51 miles west of, 50 feet west of t. b. m. on sign post; iron post stamped "2,012"	2,014.651
Simmler, 3.51 miles west of, at fork of road to southeast, in south side of sign post; spike, painted mark around spike (no elevation painted)	2,013.52
Simmler, 1.00 mile west of, at section corner of secs. 35, 36, 1, and 2, on north side of road, in base of corner fence post; spike, "U. S. B. M. 2,002" painted on large gate post	2,003.79
Simmler, 250 feet north of post office, 50 feet south of old mill, T. 30 S., R. 19 E., northwest corner; iron post stamped "2,047 B 1908 20 B" (2,046.783=Bull. 481, p. 93 value) in Simmler quadrangle	2,047.283

NIPOMO QUADRANGLE

[Latitude 35°–35° 15′; longitude 120° 15′–120° 30′]

SAN LUIS OBISPO COUNTY

Primary leveling by H. S. Crowe in 1901

From east border of quadrangle west and southwest to Suey ranch

	Feet
Wasioja post office, 37.4 miles west of, 2.2 miles west of fence across road on line between Suey and Dutch ranches, 20 feet west of road, on flat, on second bench above river; iron post stamped "705 L. A."	708.651
Wasioja post office, 38.5 miles west of, 40 feet west of road where road runs on bench above river, on notch cut in live-oak tree 42 inches in diameter; 20-penny wire nail	673.37
Wasioja post office, 42.2 miles west of, 4 feet south of gate post in fence on Suey ranch, 0.25 mile east of Alamo Creek crossing; iron post stamped "562 L. A."	565.704
Alamo Creek; water surface	550.9
Suey Hill, summit of; center of wagon road	882.9

Primary leveling by Gerald Fitz Gerald in 1918

From Suey ranch north along highways to Huasna

Suey ranch house, at entrance to grounds, 8 feet east of gate post, at junction of fence lines, 20 feet west of center of road; iron post stamped "377 L. A." (in Lompoc quadrangle)	380.167

	Feet
Santa Maria, 5.1 miles north of, on highway through Suey ranch, at panel gate, 5 feet south of road center; chiseled rock, "U. S. B. M. 435" painted on fence	438.38
Santa Maria, 6.6 miles north of, on highway through Suey ranch, at road forks, 12 feet northeast of road, in root of 14-inch oak tree; copper nail and washer, triangle scribed "584," aluminum tag stamped "584"	586.83
Santa Maria, 7.2 miles north of, on highway through Suey ranch, at summit of hill, at line fence, 25 feet southeast of panel gate, 2 feet northeast of fence; iron post stamped "879 1918"	882.398
Santa Maria, 8.5 miles north of, on Cuyama road, 15 feet from road, in root of 3.5-foot oak tree; copper nail and washer, triangle on tree scribed "650," aluminum plate stamped "650"	653.05
Santa Maria, 8.7 miles north of, on west bank of Cuyama River, 800 feet north of where road drops into river, 15 feet from bank, in root of large oak tree; copper nail and washer, triangle scribed "533," aluminum tag stamped "533"	535.67
Santa Maria, 9.4 miles northeast of Cuyama road, road forks, 6 feet above road, on southeast river bank, in root of 2.5-foot live-oak tree; copper nail and washer, triangle on tree scribed "541," aluminum tag stamped "541"	544.41
Santa Maria, 10.7 miles north of, on north bank of Huasna Creek, 60 feet south of where road crosses creek, in root of 18-inch cottonwood tree; copper nail and washer, triangle on tree scribed "549," aluminum plate stamped "549"	551.72
Santa Maria, 12.5 miles north of, on Huasna Creek road, on north bank of creek, at line fence in panel gate, in root of cottonwood tree; copper nail and washer, triangle on tree scribed "576," aluminum tag stamped "576"	578.76
Santa Maria, 13.5 miles north of, at C. Adams's ranch, 350 feet north of ranch house, 40 feet north of road, on ledge; bronze tablet stamped "607"	610.489
Santa Maria, 14.0 miles north of, 0.6 mile north of Adams ranch house, east side of road, in root of large oak tree; copper nail and washer	618.74
Santa Maria, 15.8 miles north of, 50 feet from north bank of creek where road crosses, in root of 2-foot white-oak tree; copper nail and washer, triangle on tree painted "623," aluminum plate stamped "623"	626.14
Santa Maria, 16.6 miles north of, on Huasna Creek road, at Abe Porter's ranch house, 150 feet west of road, on concrete entrance to red garage, north end; bronze tablet stamped "649"	651.785
Huasna, 2.7 miles south of, west bank of creek, in root of large white-oak tree, north side of panel gate; copper nail and washer, triangle on tree scribed "681," aluminum plate stamped "681"	684.37
Huasna School, 1.8 miles south of, 150 feet east of deserted farmhouse, on west side of road, on root of lone white-oak tree; copper nail and washer	767.28
Huasna school, 1.1 miles south of, in front of Brown farm, north side of road, in root of white-oak tree; copper nail, painted "744"	747.33
Huasna School, northeast corner of schoolhouse, in concrete foundation; bronze tablet stamped "772"	774.772

Primary leveling by Gerald Fitz Gerald in 1919

From point east of Arroyo Grande in Arroyo Grande quadrangle east along highways to Huasna

	Feet
Arroyo Grande, 6.4 miles east of, in root of large live-oak tree 5 feet east of road; copper nail, triangle on tree marked "363"	364.20
Arroyo Grande, 7.9 miles south of, in root of large white-oak tree, 5 feet south of road; copper nail and washer, triangle on tree scribed "434"	435.17
Arroyo Grande, 9.1 miles east of, at private road leading into Tar Springs ranch house, 200 feet east of panel gate, on main road, in root of large white-oak tree; copper nail and washer, scribed "U. S. 545"	545.99
Arroyo Grande, 10.5 miles east of, near foot of grade, in root of twin live-oak trees, 5 feet north of road; copper nail and washer, tree scribed "726"	727.18
Arroyo Grande, 11.6 miles east of, summit of grade, in root of live-oak tree, 15 feet south of road; copper nail and washer, triangle scribed "U. S. 1,006"	1,006.99
Arroyo Grande, 12.3 miles east of, 0.8 mile west of Huasna School. at road forks, on gate brace; copper nail and washer, aluminum tag on post stamped "808," post scribed "808"	808.75
Huasna School, northeast corner of building; bronze tablet stamped "772"	774.772

From Huasna northeast along highways into Avenal quadrangle

Huasna School, northwest corner of building; aluminum tablet stamped "772"	774.772
Huasna School, 0.8 mile north of, at foot of grade, on north end of wooden culvert; nail, north end painted "U. S. 881 B. M."	884.38
Huasna School, 1.2 miles north of, at summit; oak tree 40 feet south of gate scribed "1,081"	1,083.73
Huasna, 3 miles north of, T. Porter's red barn, northwest corner, on top of concrete wall; aluminum tablet stamped "787.034"	789.675
Huasna, 4 miles north of, at sharp turn in road, in corner post brace; nail, "U. S. 802 B. M." painted on post	804.58
Huasna, 5.7 miles northeast of, at old forks, in fence line on north side of road, in root of live-oak tree, nail and washer, triangle on tree scribed "885"	887.77
Huasna, 6.3 miles northeast of, 800 feet northeast of farmhouse, north side of road; aluminum tablet set in rock, stamped "944"	947.19
Huasna, 6.8 miles northeast of, 200 feet east of Mrs. Hallway's house, 30 feet south of fence; aluminum tablet stamped "974"	976.526
Huasna, 8 miles east of, 25 feet east of wire gate, 90 feet from creek crossing, on large sandstone rock; painted point, rock painted "U. S. B. M. 1,091"	1,093.55
Huasna, 9 miles east of, 200 feet north of Montgomery ranch house, 10 feet north of road, in root of twin cottonwood tree; nail, triangle on tree scribed "U. S. 1,205"	1,204.34
Huasna, 10 miles east of, 500 feet northwest of Lane's farmhouse, 30 feet north of fence corner, 8 feet south of road, in boulder; aluminum tablet stamped "1,448"	1,451.217

Primary leveling by Gerald Fitz Gerald in 1918–1919

From Huasna north along highways into Pozo quadrangle. (Part of an unadjusted line closing +1.104 feet upon adjusted elevation at Pozo. This line should be releveled)

	Feet
Huasna, 1.4 miles north of, on road to Musick, 1 mile south of Park's ranch house, east side of road, on brace of gate; copper nail and washer, aluminum tag stamped "821," fence painted "U. S. 821 B. M."	823.808
Huasna, 3 miles north of, at ranch Huasna, 300 feet north of ranch house, at southeast corner of big barn, 2.5 feet from barn, in concrete post; bronze tablet stamped "919"	921.716
Huasna School, 4 miles north of, on north line fence of Parks ranch, panel gate; copper nail and washer, on gate painted "1,082," aluminum tag stamped 1,082"	1,084.791
Musick, 3.4 miles south of, at Mrs. Hasbrok's vineyard, 350 feet west of house, on large live-oak tree; copper nail and washer, on post, triangle scribed "902," aluminum tag stamped "902"	904.405
Musick post office, 2.4 miles south of, 150 feet west of deserted farmhouse, 20 feet north of road, in root of large oak tree; copper nail, triangle on tree scribed "815," aluminum tag stamped "815"	817.856
Musick post office, 1.2 miles south of, 300 feet north of road forks, 6 feet west of water trough, in root of large sycamore tree; copper nail, triangle on tree scribed "708," aluminum tag stamped 708"	711.054
Musick post office, 40 feet west of, southeast corner of Mrs. Hasbrok's house; bronze tablet stamped "844"	846.825
Musick, 1.1 miles north of, at road forks, in root of large oak tree, 5 feet from road; copper nail, triangle on tree scribed "944," aluminum tag stamped "944"	946.099
Musick, 2.2 miles north of, at summit, in root of live-oak tree, 35 feet south of gate; copper nail, triangle scribed "1,417," aluminum tag stamped "1,417"	1,420.428
Musick, 3.5 miles north of, 100 feet north of sharp turn in Salt Creek, 15 feet from road, in root of live-oak tree; copper nail, triangle on tree scribed "1,387," aluminum tag stamped "1,387"	1,389.771
Musick, 5.2 miles north of, 1,000 feet north of summit, 30 feet east of gate, 2 feet south of fence; iron post stamped "1,850"	1,852.802

PASO ROBLES QUADRANGLE

[Latitude 35° 30′–35° 45′; longitude 120° 30′–120° 45′]

SAN LUIS OBISPO COUNTY

Precise leveling by the U. S. Coast and Geodetic Survey in 1919

South along Southern Pacific R. R.

	Feet
San Miguel, 0.9 mile south of, railroad mileage 207.9, east end of concrete culvert 207–F; chiseled square of United States Geological Survey, marked "U. S. B. M. 622" (U. S. C. & G. S. b. m. Z–23)	622.607
San Miguel, 2 miles south of, railroad mileage 208.9, east end of concrete culvert 208–H; chiseled square of United States Geological Survey marked "U. S. B. M. 642" (U. S. C. & G. S. b. m. A–24)	642.528

	Feet
San Miguel, 2.4 miles south of, railroad mileage 209.4, near railroad bridge 209–C, south abutment of steel highway bridge; United States Geological Survey bronze tablet stamped "635 4 1916" (U. S. C. & G. S. b. m. B–24)	635.543
San Miguel, 2.9 miles south of, on concrete culvert 209–F, east end of south abutment, 4 meters east of center line of track, 0.7 meter below track, railroad mileage 209.9; red-metal disk on cement (U. S. C. & G. S. b. m. C–24)	646.954
Wellsona, railroad mileage 210.9; east end of concrete culvert 210–E; chiseled square marked "U. S. 661" (U. S. C. & G. S. b. m. D–24)	671.219
San Miguel, 5 miles south of, west head wall of highway culvert, south of cattle guard 212A–B, 15 meters west of center line of track, level with track, railroad mileage 212.0; surface within an outlined square on horizontal masonry or metal (U. S. C. & G. S. b. m. E–24)	670.130
Paso Robles, 3.4 miles north of, railraod mileage 212.7, east end of south abutment of concrete under-track crossing 212–H; Geological Survey bronze tablet stamped "683 5 1916" (U. S. C. & G. S. b. m. F–24)	683.693
Paso Robles, 2.5 miles north of, west end of concrete culvert 213–B; Geological Survey chiseled square, marked "U. S. 682" (U. S. C. & G. S. b. m. G–24)	682.305
Paso Robles, 1.8 miles north of, railroad mileage 214.2, near city limit signboard, west end of concrete culvert 214–B; Geological Survey chiseled square, marked "U. S. 692" (U. S. C. & G. S. b. m. H–24)	692.171
Paso Robles, 1.1 miles north of, railroad mileage 215.2, west head wall of concrete box culvert 215–A, 5 meters west of center line of track, 1 meter below track; red-metal disk set in cement (U. S. C. & G. S. b. m. I–24)	712.348
Paso Robles, intersection of Southern Pacific R. R. with Thirteenth Street, railroad mileage 215.9, west end of concrete culvert 2159; Geological Survey bronze tablet stamped "715 6 1916" (U. S. C. & G. S. b. m. J–24)	715.287
Paso Robles Public Library, at main entrance to reading room, top of east pillar; United States Geological Survey bronze tablet stamped "740 7 1916" (U. S. C. & G. S. b. m. K–24)	739.999
Paso Robles, Municipal Bath House, east footing of main entrance; red-metal disk set on cement (U. S. C. & G. S. b. m. L–24)	728.811
Paso Robles, 1.2 miles south of, railroad mileage 217.0, opposite semaphore 217.1, east end of concrete highway culvert; chiseled square, marked "U. S. 720" (U. S. C. & G. S. b. m. N–24)	719.864
Paso Robles, 1.2 miles south of, west head wall of concrete box culvert 217–B, 4 meters west of track, 1 meter below track, railroad mileage 217.5; surface within an outlined square on masonry (U. S. C. & G. S. b. m. O–24)	720.950
Paso Robles, 2.0 miles south of, railroad mileage 218.3, west end of concrete culvert; chiseled square, marked "U. S. I 29" (U. S. C. & G. S. b. m. P–24)	729.434
Paso Robles, 2.6 miles south of, east head wall of concrete box culvert 248-F, 4 meters east of center line of track, 1 meter below	

	Feet
track, railroad mileage 218.9; red-metal disk set in cement (U. S. C. & G. S. b. m. Q–24)	731.570
Paso Robles, east end of south abutment of Salinas River bridge, 230 meters north of railroad; red-metal disk on cement (U. S. C. G. S. b. m. M–24)	701.062
Paso Robles, 3.6 miles south of, 250 feet south of road crossing 219B–D, east end of concrete culvert 219–E; Geological Survey bronze tablet stamped "734 S 1916" (U. S. C. & G. S. b. m. R–24)	733.945
Templeton, 1.8 miles north of, at mileage 219.8, on south end of concrete railroad culvert 219–H, east of the right of way and about half a meter below the elevation of track; red-metal disk set in cement (U. S. C. & G. S. b. m. S–24)	750.907
Templeton, 2,000 feet south of station, near south end of heavy cut at mileage 222.1, in north abutment of steel highway bridge, about 100 feet east of track, at elevation of bridge roadway on west side; red metal disk (U. S. C. & G. S. b. m. T–24)	769.631
Templeton, 0.8 mile south of, at mileage 222.5, in sandstone railroad culvert, on east side of track and south end of culvert; bench mark in top of rounded knob (U. S. C. & G. S. b. m. U–24)	773.483
Templeton, 1.4 miles south of, at railroad mileage 223.2, a Geological Survey bronze tablet in center cylinder pier of steel highway bridge parallel to tank opposite, railroad bridge 223–A, plate is on north side of roadway (U. S. C. & G. S. b. m. V–24)	774.401
Asuncion, 0.5 mile south of, at railroad mileage 225.5, plate set in edge of concrete reservoir at the northwest corner, reservoir is about 20 meters east of track and about 2 meters below elevation of it (U. S. C. & G. S. b. m. W–24)	821.265

Primary leveling by R. C. Seitz in 1917

From San Miguel along highways southeast to Estrella bridge, thence northeast to north border of quadrangle

San Miguel, 2.30 miles (by road) southeast of, right angle bent in road, on east side of road, in base of telephone pole; spike, painted "U. S. 673 B. M."	673.87
San Miguel, 3.30 miles southeast of, 200 feet west of small wooden bridge, near fence on south side of road; iron post stamped "677 1917"	677.040
San Miguel, 4.30 miles southeast of, 250 feet south of small wooden bridge, on east side of road, in base of telephone pole; spike, painted "U. S. 660 B. M."	660.51
San Miguel, 5.20 miles southeast of, 100 feet north of bend in road, at R. J. Farnell's house, in base of telephone pole; spike, painted "U. S. 713 B. M."	713.55
San Miguel, 6.30 miles southeast of, 2.53 miles west of Estrella Bridge, northwest angle at T road north; iron post stamped "707 1917"	707.255
Estrella Bridge, 1.53 miles west of, at bend in road about 0.5 mile south of cemetery, in base of telephone pole; spike, painted "U. S. 756 B. M."	756.26
Estrella Bridge, 0.82 mile west of, at bend in road at entrance to ranch, in base of telephone pole; spike, painted "U. S. 772 B. M." (erroneously painted)	742.75

	Feet
Estrella Bridge, top of coping at northeast corner; bronze tablet stamped "724 1917"	721.217
Estrella Bridge, 1.33 miles northeast of, T road north, top of brace post on south side of road; roofing nail, painted "U. S. 832 B. M."	831.92
Estrella Bridge, 2.35 miles north of, on north side of road, in base of fence post; spike, painted "U. S. 880 B. M."	883.78
Estrella Bridge, 3.10 miles northeast of, 100 feet south of creek crossing, 25 feet east of road, on private road east; iron post stamped "933 1917" (reset and remarked by L. F. Biggs in 1918)	933.278
Estrella Bridge, 4.20 miles north of, 1.1 miles north of road forks, creek skirts road, on east side of road, in base of telephone pole; spike, painted "U. S. 1,005 B. M."	1,004.94

Primary leveling by R. C. Seitz in 1917 and L. F. Biggs in 1918

From Paso Robles west along highways to west border of quadrangle (leveled twice)

Paso Robles, in northwest part of town, on east side of City Side ranch, top of northeast corner of concrete culvert across street; chiseled mark, painted "U. S. 760 B. M."	760.15
Forks of road	808
Paso Robles, 2.00 miles west of, 20 feet north of road, at southeast corner of Morris Van Wormer's orchard, in root of live-oak tree; copper nail and washer, painted "U. S. 955 B. M."	933.44
Paso Robles, 3 miles west of, east side of road, in triangle at forks, in root of tree; copper nail and washer, not painted	1,012.02
Paso Robles, 3 miles west of, on west side of triangle at forks of road; iron post stamped "1,019 1917"	1,018.892
Paso Robles, 3.96 miles west of, southeast corner of watering trough; copper nail and washer, painted "U. S. 1,189 B. M."	1,189.27

From Paso Robles along highways south and east to Geneseo, thence north to Estrella bridge

Paso Robles, junction of Thirteenth Street with Southern Pacific R. R., west end of concrete culvert 215–S; bronze tablet stamped "715 6 1916" (U. S. C. & G. S. J–24)	715.287
Paso Robles, 1.24 miles southeast of, road forks, in base of high-power line pole No. 531; spike, painted "U. S. 745 B. M."	744.87
Paso Robles, 1.90 miles southeast of, at road east to Shandon and Creston, in base of high-power line pole No. 543; spike, painted "U. S. 745 B. M."	745.48
Paso Robles, 2.97 miles southeast of, 1 mile east of river road, near north fence line, 40 feet north of 30-inch oak tree; iron post stamped "808 1917"	808.092
Paso Robles, 3.71 miles southeast of, T road north, in base of telephone pole; spike, painted "U. S. 843 B. M."	843.74
Private road east	860.0
Paso Robles, 4.95 miles southeast of, 75 feet east of line fence, on south side of road, in base of telephone pole; spike, painted "U. S. 881 B. M."	881.04

	Feet
Paso Robles, 6.47 miles southeast of, east end of "wide spot" in road, 30 feet south of road, 15 feet southwest of 30-inch oak tree; iron post stamped "935 1917"	935.629
Paso Robles, 7.60 miles southeast of, in front of ranch house, on top of concrete coping at north end of culvert; chiseled mark, painted "U. S. 963 B. M."	962.94
Paso Robles, 8.60 miles southeast of, 0.38 mile west of Linne post office, top of concrete coping at north end of culvert; chiseled mark, painted "U. S. 1,031 B. M."	1,031.51
Paso Robles, 9.58 miles southeast of, 0.85 mile west of Geneseo, in base of corner fence post; spike, painted "U. S. 1,074 B. M."	1,073.62
Paso Robles, 10.43 miles southeast of, at Geneseo, in northeast angle of crossroads; iron post stamped "1,014 1917"	1,014.323
Geneseo, 1 mile north of, 200 feet east of Huero Huero Creek, on north side of road, in root of large spreading cottonwood tree; roofing nail, painted "U. S. 933 B. M."	932.96
Geneseo, 2.05 miles northwest of, in north angle at T road northeast, in root of large oak tree; roofing nail, painted "U. S. 905 B. M."	904.81
Geneseo, 2.87 miles northwest of, 0.46 mile south of summit of road, on east side of road; in base of stump; roofing nail, painted "1,043 B. M."	1,045.00
Geneseo, 3.33 miles northwest of, 2.20 miles south of Union, 30 feet east of road at summit; iron post stamped "1,200 1917"	1,200.059
Union, 1.35 miles south of, 150 feet north of L. Lauridson's house, on east side of road, in base of corner fence post; spike, painted "U. S. 1,038 B. M."	1,038.15
Union, at southeast corner of schoolyard; iron post probably stamped "1,025 1919" (reset by G. Fitz Gerald 1919)	1,028.147
Union, 0.95 mile east of, on east side of road, in base of telephone pole; spike, painted "U. S. 1,069 B. M."	1,068.68
Union, 1.95 miles east of, in front of George Blancott's house, on south side of road, in telephone pole; spike, painted "U. S. 995 B. M."	994.96
Union, 3.00 miles east of, about 0.75 mile northwest of Fifteen-mile Bridge, in fence corner on south side of road; iron post stamped "1,008 1917" (reset and restamped by L. F. Biggs in 1918)	1,008.071
Estrella Bridge, 6 miles southeast of, on east side of road, in base of 48-inch live-oak tree; spike, painted "U. S. 853 B. M."	849.96
Estrella Bridge, 5 miles southeast of, at south side of whitewashed gate on east side of road, in base of fence post; spike, painted "U. S. 813 B. M."	813.19
Estrella Bridge, 3.70 miles southeast of, southeast corner of yard at Phillips School; iron post stamped "804 1917" (reset and restamped by L. F. Biggs in 1918)	804.532
Estrella Bridge, 2.65 miles southeast of, on south side of road opposite gate and near mail box, in base of fence post; spike, painted "U. S. 769 B. M."	769.01
Estrella Bridge, 1.90 miles southeast of, in base of telephone pole and fence post; spike, painted "U. S. 755 B. M."	754.77
Estrella Bridge, 0.70 mile southeast of, at entrance to G. E. Withrow's ranch, in base of west gate post; spike, painted "U. S. 731 B. M."	731.04

Primary leveling by L. F. Biggs in 1916. Corrected to agree with U. S. C. & G. S. precise leveling over same route

From point near San Miguel south along Southern Pacific R. R. to Asuncion (double-rodded line)

	Feet
San Miguel, 0.9 mile south of, east end of concrete culvert 207–F; chiseled square, marked "U. S. 622" (U. S. C. & G. S. B–24)	622.61
San Miguel, 2.0 miles south of, east end of concrete culvert 208–H; chiseled square, marked "U. S. 642" (U. S. C. & G. S. A–24)	642.53
San Miguel, 2.4 miles south of, near railroad bridge 209–C, in south abutment of steel highway bridge; bronze tablet stamped "635 4 1916" (U. S. C. & G. S. B–24)	635.543
Wellsona, east end of concrete culvert 210–E; chiseled square, marked "U. S. 661" (U. S. C. & G. S. D–24)	671.219
Paso Robles, 4.4 miles north of, east end of concrete culvert; chiseled square, marked "U. S. 665"	665.19
Paso Robles, 3.4 miles north of, east end of south abutment of concrete under track crossing 212–H; bronze tablet stamped "683 5 1916" (U. S. C. & G. S. F–24)	683.693
Paso Robles, 2.5 miles north of, west end of concrete culvert 123–B; chiseled square, marked "U. S. 682" (U. S. C. & G. S. G–24)	682.30
Paso Robles, 1.8 miles north of, near city limit signboard, west end of concrete culvert 214–B; chiseled square, marked "U. S. 692" (U. S. C. & G. S. H–24)	692.17
Eocene, at road crossing 214–F. H.; top of rail	714.5
Paso Robles, intersection of Southern Pacific R. R. with Thirteenth Street, west end of concrete culvert 215–S; bronze tablet stamped "715 6 1916" (U. S. C. & G. S. J–24)	715.287
Paso Robles Public Library, at main entrance to reading room, top of east pillar; bronze tablet stamped "740 7 1916" (U. S. C. & G. S. K–24)	739.899
Paso Robles, 1.2 miles south of, opposite semaphore 217.1, east end of concrete highway culvert; chiseled square, marked "U. S. 720" (U. S. C. & G. S. N–24)	719.86
Paso Robles, 2.6 miles south of, west end of concrete culvert 218–C; chiseled square, marked "U. S. 729" (U. S. C. & G. S. P–24)	729.434
Paso Robles, 3.6 miles south of, 250 feet south of road crossing 219 B D, east end of concrete culvert 219–E; bronze tablet stamped "734 8 1916" (U. S. C. & G. S. R–24)	733.945
Templeton, 1.1 miles north of, base of semaphore 221.2; chiseled square, marked "U. S. 757"	757.53
Templeton, concrete step leading to waiting room of Southern Pacific R. R. depot; chiseled square, marked "U. S. 777"	777.40
Templeton, 1.5 miles south of, 60 feet west of railroad bridge 223–A, east end of center pier of steel highway bridge; bronze tablet stamped "774 9 1911" (U. S. C. & G. S. V–24)	774.401
Asuncion, 0.4 mile north of, west end of stone culvert 224–B; chiseled square, marked "U. S. 816"	816.50
Asuncion, north end of switch, east end of concrete culvert 242–D; chiseled square, marked "U. S. 824"	824.19
Atascadero, 200 feet north of, switch, west end of concrete culvert 226; chiseled square, marked "U. S. 824"	823.80
Atascadero, east end of south stone abutment of railroad bridge 226–D; bronze tablet stamped "834 10 1916" (U. S. C. & G. S. X–24)	834.513

Primary leveling by N. E. Ballmer in 1918

From northeast corner of San Luis Obispo quadrangle northwest along highways to Geneseo School, 10.4 miles southeast of Paso Robles

	Feet
Creston, 1.23 miles southeast of, 600 feet north of Huera Huera Creek crossing, on west side of road, in fence post; spike painted "U. S. B. M. 1,153" on fence post	1,153.72
Creston, 0.54 mile southeast of, on east side of road, in fence post; spike, painted "U. S. B. M. 1,124" on fence post	1,123.86
Creston, opposite post office; intersection of streets, "1,115" painted on telephone post	1,115.22
Creston, 0.45 mile north of, at T road east, at northeast corner of intersection, in stub of telephone pole; spike, "U. S. B. M. 1,097" painted on telephone pole	1,097.51
Geneseo School, 2.80 miles southeast of, 1.11 miles north of Creston, at T road west, in corner post at northwest corner; spike, painted "U. S. B. M. 1,080" on post	1,080.18
Geneseo School, 2.00 miles southeast of, south of small drain crossing, on east side of road, in fence post spike; "U. S. B. M. 1,060" painted on fence post	1,059.95
Geneseo School, 0.94 mile southeast of, at T road east, in telephone pole; spike, painted "U. S. B. M. 1,029" on telephone pole	1,029.64
Paso Robles, 10.43 miles southeast of, at Geneseo School, in northeast angle of crossroads; iron post stamped "1,014 1917"	1,014.326

Primary leveling by Gerald Fitz Gerald in 1919

From Cholame quadrangle west along highways to point near Union. (Part of an unadjusted line, from Cammatti ranch, Pozo quadrangle, closing 2.213 feet low upon adjusted elevation 2 miles northeast of Union. Line should be releveled)

Shandon, 8.4 miles west of, Fifteen-mile bridge, southwest concrete wing; aluminum tablet stamped "850"	850.926
Shandon, 9.3 miles west of, at summit of hill, in pole; nail, painted "U. S. 1,078 B. M."	1,079.580
Union, 2 miles northeast of, 250 feet west of T road, in front of farmhouse; Seitz's bench mark on pole, painted "U. S. 995 B. M." (1920 adj. 994.96 feet)	992.747

POZO QUADRANGLE

[Latitude 35° 15′–35° 30′; longitude 120° 15′–120° 30′]

SAN LUIS OBISPO COUNTY

Primary leveling by N. E. Ballmer in 1918

From San Luis Obispo quadrangle along highways east to Pozo, thence northeast to Cammatti ranch, thence northwest to northeast corner of San Luis Obispo quadrangle

	Feet
Santa Margarita, 9.60 miles southeast of, 8.76 miles northwest of Pozo, at Salinas River bridge, in south wing of west abutment; bronze tablet stamped "1,235"	1,235.861
Pozo, 7.68 miles northwest of, on north side of road, in big pine tree; spike, painted "U. S. B. M. 1,253" on big pine tree	1,254.36
Pozo, 6.51 miles northwest of, at south edge of road, on rock; chiseled cross, painted "U. S. B. M. 1,265" on large rock	1,266.03

	Feet
Pozo, 5.46 miles northwest of, on south side of road, in base of 2-foot leaning pine tree; spike, painted "U. S. B. M. 1,285" on 2-foot leaning pine tree	1,285.90
Pozo, 5.46 miles northwest of, on south side of road, 20 feet east of temporary bench mark on tree; iron post stamped "1,283"	1,284.721
Pozo, 4.23 miles northwest of, 175 feet southeast of road forks, in southwest corner of floor of bridge over Toro Creek; spike, painted "U. S. B. M. 1,308" on bridge railing	1,309.20
Pozo, 3.45 miles northwest of, in front of new district school; summit in center of road, "1,343" painted on fence	1,344.27
Pozo, 3.09 miles northwest of, 75 feet west of small creek crossing, on south side of road, in base of willow stump; spike, "U. S. B. M. 1,330" painted on willow stump	1,331.22
Pozo, 2.45 miles west of, 300 feet north of where road strikes Salinas River, on east side of road, in base of stump; spike, "U. S. B. M. 1,371" painted on stump	1,372.18
Pozo, 2.45 miles west of, 300 feet north of where road strikes Salinas River, on east side of road, 60 feet east of temporary bench mark on stump, 40 feet inside of fence; bronze tablet in boulder, stamped "1,372"	1,373.330
Pozo, 2.00 miles west of, at road forks, in front of barn; center of road, "1,368.4" painted on barn	1,369.7
Pozo, 1.43 miles west of, about 600 feet west of summit, on south side of road, on rock; chiseled square, painted "U. S. B. M. 1,451"	1,451.98
Pozo, 1.00 mile west of, at summit, in center of road, "1,495" painted on telephone pole	1,496.36
Pozo, 0.48 mile west of, at bend in road, in northwest corner of bridge; spike, "U. S. B. M. 1,452" painted on bridge railing	1,453.45
Pozo, 0.60 mile east of, at T road north, at bend in road, in west gate post, spike, "U. S. B. M. 1,476" painted on fence post	1,477.65
Pozo, 300 feet east of post office, southeast abutment of concrete bridge; bronze tablet stamped "1,456" (B. M. is on single spur line)	1,457.493
Pozo, 1.39 miles east of, in gate post, on west side of road at T road east; spike, "U. S. B. M. 1,511" painted on gate post	1,512.49
Pozo, 1.80 miles east of, at summit, in center of road; "1,577" painted on telephone pole	1,578.39
Pozo, 2.67 miles northeast of, on east side of road, in base of big white-oak tree; spike, "U. S. B. M. 1,616" painted on big white-oak tree	1,617.11
Pozo, 3.40 miles northeast of, opposite lane turning west, in center of road, "1,695" painted on fence post	1,696.43
Pozo, 3.84 miles northeast of, on northwest side of road, at road forks, in small oak tree; spike, "U. S. B. M. 1,750" painted on small oak tree	1,751.26
Pozo, 3.84 miles northeast of, near road forks, 70 feet northeast of temporary bench mark "1,750"; iron post stamped "1,753"	1,754.459
Pozo, 4.80 miles northeast of, 75 feet north of creek crossing, opposite danger sign, on west side of road, in live-oak stub; spike, "1,901" painted on live-oak tree	1,902.36

	Feet
Pozo, 5.65 miles northeast of, on south side of road, in post at southwest corner of small box culvert across road; spike, "U. S. B. M 2,250" painted on live-oak tree	2,251.96
Pozo, 6.79 miles northeast of, 775 feet southwest of summit, on north side of road, in oak tree; spike, "U. S. B. M 2,599" painted on oak tree	2,600.58
Pozo, 6.94 miles northeast of, 30 feet east of mail box, at summit of road, on south side of road, in base of small oak tree; spike, "U. S. B. M. 2,651" painted on post of mail box	2,652.92
Pozo, 6.94 miles northeast of, 40 feet northeast of mail box, north side of road; iron post stamped "2,652"	2,653.433
Pozo, 8.14 miles northeast of, 15 feet west of watering trough, on south side of road, on rock; chiseled square, "U. S. B. M. 2,149" painted on rock	2,150.22
Pozo, 9.13 miles northeast of, at southeast corner of culvert, on rock; chiseled square, "U. S. B. M. 1,990" painted on big rock	1,991.33
Pozo, 10.30 miles northeast of, 5.71 miles northwest of La Panza, 500 feet west of Alley ranch house, 30 feet east of road, in base of big cottonwood tree; spike, "U. S. B. M. 1,853" painted on big cottonwood tree	1,854.14
Alley ranch house, 1.00 mile north of, at southeast corner of road forks, on rock; chiseled cross, "U. S. B. M. 1,927" painted on oak tree	1,928.86
Alley ranch house, 1.81 miles north of, on west side of road, in base of oak tree; spike, "2,066" painted on oak tree	2,067.62
Alley ranch, 2.41 miles north of, 200 feet south of forks of road, in east gate post; spike, "U. S. B. M. 1,985" painted on east gatepost	1,986.86
Alley ranch, 2.41 miles north of, 200 feet south of road forks, 30 feet east of temporary bench mark on gate, set in top of 3-foot concrete post; aluminum tablet stamped "1,985"	1,986.878
Alley ranch, 3.70 miles north of, 1.05 miles southeast of Cammatti ranch house, 800 feet north of foot of grade, on east side of road, in base of oak tree; spike, "U. S. B. M. 1,613" painted on oak tree	1,614.40
Cammatti ranch house, 600 feet south of; iron post stamped "A. T. Co. Sta. 2185 El 1561," also stamped "1,558"	1,558.911
Cammatti ranch, 0.35 mile north of, 200 feet west of creek crossing, at gate; center or road, painted "1,516" on gate	1,517
Cammatti ranch, 1.23 miles northwest of, 10 feet south of road, 10 feet north of oak tree, on small rock; chiseled square, painted "U. S. B. M. 1,625"	1,626.43
Cammatti ranch, 1.80 miles northwest of, 15 feet south of gate known locally as Dobie gate, in top of brace post; spike, "U. S. B. M. 1,641" painted on Dobie gate	1,642.38
Cammatti ranch, 2.91 miles northwest of, on south side of road and creek, in base of oak tree; spike, "U. S. B. M. 1,490" painted on oak tree	1,491.53
Cammatti ranch, 4.36 miles northwest of, 20 feet from forks of road, on north side of road, in horizontal tree trunk; spike, "U. S. B. M. 1,407" painted on tree trunk	1,408.59

	Feet
Cammatti ranch, 4.36 miles northwest of, 50 feet from road forks, 30 feet west of temporary bench mark on tree, in top of concrete post; aluminum tablet stamped "1,408"	1,409.128
Cammatti ranch, 5.41 miles northwest of, 2.64 miles east of Highland School, 6 feet west of gate on south side of road, in top of sawed-off 8-inch post; spike; "U. S. B. M. 1,579" painted on gate	1,580.74
Cammatti ranch, 6.91 miles northwest of, 1.12 miles north of Highland School, on west side of road at forks, in root of big oak tree; spike, "U. S. B. M. 1,454" painted on big oak tree	1,455.31
Highland School, near southwest corner of school yard, on north end of galvanized drainpipe across road; painted circle, "U. S. B. M. 1,526" painted on fence	1,527.19
Highland School, in southwest corner of school yard, in concrete post; aluminum tablet stamped "1,528"	1,529.592
Highland School, 1.00 mile west of, 500 feet east of creek crossing, on south side of road, in base of big oak tree; spike; "U. S. B. M. 1,630" painted on big oak tree	1,631.74
Highland School, 2.11 miles west of, 400 feet east of summit of road, on south side of road; 3-inch iron post stamped "A. T. Co. Sta. 1733, El. 1761"; "U. S. B. M. 1,758" painted on tree	1,759.040
Highland School, 2.89 miles west of, 50 feet west of the forks of road, in southeast corner of bridge; spike; "U. S. B. M. 1,600" painted on floor of bridge	1,601.11
Highland School, 2.89 miles west of, 150 feet west of road forks, 100 feet west of temporary bench mark, in concrete post; aluminum tablet stamped "1,598"	1,599.268
Highland School, 4.2 miles west of, 2.40 miles east of Huera Huera School, at creek crossing, on south side of road, on rock; chiseled square; "U. S. B. M. 1,436" painted on rock	1,437.65
Huera Huera School, 1.56 miles southeast of, on south side of road, rod held on 3-inch iron post on letter E; iron post stamped A. T. Co. Sta.—El.—On oak tree is painted "U. S. B. M. 1,328"	1,327.867
Huera Huera School, 0.96 mile southeast of, at T road south, on north side of road, in sign post; spike, "U. S. B. M. 1,287" painted on corner fence post	1,286.84
Creston, 4.73 miles southeast of, in front of Huera Huera School, in big oak tree in road; spike, "U. S. B. M. 1,246" painted on fence	1,246.17
Creston, 3.54 miles southeast of, 1,059 feet southeast of house, on west side of road, in fence post; spike, "U. S. B. M. 1,207" painted on fence post	1,207.16

From point 10.3 miles northeast of Pozo along highways southeast to La Panza quadrangle

Pozo, 10.3 miles northeast of, 5.7 miles northwest of La Panza, 500 feet west of Alley ranch house, 30 feet east of road, 10 feet northeast of temporary bench mark on tree; iron post stamped "1,853"	1,855.055
Alley ranch, 1.23 miles southeast of, 4.48 miles northwest of La Panza, 40 feet south of ford, on west bank of creek, on rock; chiseled cross; "U. S. B. M. 1,922" painted on big rock	1,923.58
Alley ranch, 2.31 miles southeast of, 3.40 miles west of La Panza, on north side of road, in base of big live-oak tree; spike, "U. S. B. M. 2,067" painted on big live-oak tree	2,068.53

Feet

Alley ranch house, 3.24 miles southeast of, 2.47 miles west of La Panza, 40 feet east of summit, on south side of road, in stump of small oak tree; spike; "U. S. B. M. 2,490" painted on tree 2,491.90

Alley ranch house, 3.24 miles southeast of, 2.47 miles west of La Panza, south side of road, 5 feet south of painted tree; iron post stamped "2,495" 2,496.619

Primary leveling by Gerald Fitz Gerald in 1919

From point 1.4 miles east of Pozo along highways southeast to point near northeast corner of Nipomo quadrangle

Pozo, 1.4 miles east of, at west side of road, at T road east, in north gatepost of panel gate; wire nail; painted "U. S. B. M. 1,511" 1,512.49

Pozo, 2.8 miles east of, 25 feet north of road, inside of road fence, in root of large white-oak tree; copper nail, triangle on tree, scribed "1,576 U. S." 1,577.61

Pozo, 3.5 miles east of, at summit, 10 feet north of road; stake and nail 1,730.07

Pozo, 4.7 miles east of, on road below farmhouse, 10 feet north of and above road, in root of large white-oak tree; copper nail, triangle on tree scribed "U. S. 1,505" 1,507.04

Pozo, 6.1 miles east of, at summit of small hill, 15 feet south of road, at fence line, in root of large white-oak tree; copper nail; triangle on tree scribed "U. S. 1,539" 1,540.70

Pozo, 6.8 miles east of, at Seller's ranch house, in sandstone step; bronze tablet stamped "1,514" 1,516.355

Pozo, 7.9 miles east of, 100 feet west of Avenal line-fence gate, south side of road, in root of large white-oak tree; copper nail, triangle scribed "1,549" 1,551.18

Pozo, 8.3 miles east of, 1,500 feet inside of line-fence gate, on east hill slope, 80 feet below and south of road, in large boulder; bronze tablet stamped "1,588" 1,590.134

Pozo, 9.3 miles east of, panel gate leading into T. L. Conway's ranch house, on post brace; copper nail; "U. S. 1,643 B. M." painted on gate 1,645.54

From Nipomo quadrangle north along highways to Pozo. (This line, run in 1919 by Fitz Gerald, is based upon an adjusted elevation at Huasna and closes by 1.104 feet higher than the adjusted elevation at Pozo. Should be releveled)

Musick, 6 miles north of, near large rock over road, 30 feet east of road, on oak stump; copper nail; not painted 1,701.038

Musick, 6.4 miles north of, at bottom of grade, at creek forks, 40 feet south of Huasna Creek, 10 feet east of old barn, in root of sycamore tree; copper nail, triangle on tree scribed "1,485" 1,487.920

Pozo, 3.7 miles south of, at saddle on divide, 40 feet east of road; iron post stamped "2,073" 2,076.222

Pozo, 2.5 miles south of, at deserted cabin on McNeil ranch, 60 feet west of cabin, 6 feet west of road, in root of white-oak tree; copper nail; triangle on tree scribed "1,660" 1,662.680

Pozo, 0.5 mile east of post office, at bend of road at panel gate, in gatepost; wire nail, painted U. S. B. M. 1,476.2 (adjusted elevation=1,477.653 feet) 1,478.757

From Cammatti ranch north along highway to Cholame quadrangle. (This line, run by Fitz Gerald, is part of a line closing 2.213 feet lower than adjusted elevation at point 2 miles northeast of Union in Paso Robles quadrangle)

	Feet
Cammatti ranch, 4.36 miles northwest of, 20 feet from forks in road, on north side of road, in tree trunk; spike, "U. S. 1,407 B. M." painted on tree	1,408.59
Shandon, 15.7 miles south of, 50 feet east of road, in root of very large white-oak tree used as southwest corner fence post of alfalfa patch; nail, "U. S. 1,351" marked on tree	1,352.436
Shandon, 14.9 miles south of, 150 feet east of road, in root of large white-oak tree; nail, triangle on tree scribed "U. S. 1,322"	1,323.807
Shandon, 14 miles southeast of, 3.2 miles southeast of Canyon ranch, 40 feet east of panel gate, top of 8-inch casing; "U. S. 1,306 B. M." painted on gate	1,307.392

SAN LUIS OBISPO QUADRANGLE

[Latitude 35° 15′–35° 30′; longitude 120° 30′–120° 45′]

SAN LUIS OBISPO COUNTY

Precise leveling by the U. S. Coast and Geodetic Survey in 1919–20

South along Southern Pacific R. R.

	Feet
Atascadero, 1.5 miles north of, at railway mileage 226.5, in east stone abutment of railroad plate-girder bridge 226–D; a Geological Survey bronze tablet stamped "834 10 1916" (U. S. C. & G. S. b. m. X–24)	834.513
Atascadero, 0.6 mile north of, at mileage 227.4, in south end of concrete culvert 227–A, east side of track and about 1 meter below it; red metal disk (U. S. C. & G. S. b. m. Y–24)	838.866
Atascadero, 0.9 mile south of, at mileage 228.9, in north abutment of sandstone cattle pass, on east side of track; red metal disk (U. S. C. & G. S. b. m. Z–24)	863.230
Eaglet, 0.3 mile north of, at mileage 230.0, east end of stone abutment of concrete culvert 230–A; a Geological Survey bronze tablet stamped "880 11 1916" (U. S. C. & G. S. b. m. A–25)	879.815
Santa Margarita, 3.1 miles north of, at mileage 232.4, in north abutment of steel railroad bridge over Santa Margarita Creek, on east side of track; red metal disk (U. S. C. & G. S. b. m. B–25)	917.308
Santa Margarita, 2.5 miles north of, opposite and 600 feet west of railroad culvert 232–G, at mileage 232.8, in east abutment of steel highway bridge over Santa Margarita Creek; a Geological Survey bronze tablet stamped "931 12 1916" (U. S. C. & G. S. b. m. C–25)	931.668
Santa Margarita, north end of town, opposite railway mileage 235.2, west end of south abutment of highway bridge; a Geological Survey bronze tablet stamped "995 13 1916" (U. S. C. & G. S. b. m D–25)	995.700
Santa Margarita, about 2,500 feet west of station in most northerly pier supporting large Southern Pacific R. R. water tank; red metal disk (U. S. C. & G. S. b. m. E–25)	1,011.268
Santa Margarita, 1.6 miles south of, at railroad mileage 237.2, center of the "9" in 1918, railroad culvert 237–A; surface within an outlined square cut on masonry (U. S. C. & G. S. b. m. F–25)	1,109.703

	Feet
Cuesta, opposite milepost 239, west end of concrete highway culvert; a Geological Survey bronze tablet stamped "1,314 14 1916" (U. S. C. & G. S. b. m. G–25)	1,305.286
Cuesta, north entrance to tunnel No. 6, on east side of track, about 4 feet above track, immediately below portal, set vertically in concrete; red metal disk (U. S. C. & G. S. b. m. H–25)	1,346.566
Thyle (telephone station at south entrance to tunnel No. 6) east of track, in abutment to concrete culvert, about 50 feet from entrance to tunnel; red metal disk (U. S. C. & G. S. b. m. J–25)	1,307.547
Tunnel No. 9, south end of, at mileage 241, set vertically in west side of entrance, about 4 feet above ground; red metal disk (U. S. C. & G. S. b. m. K–25)	1,212.514
Tunnel No. 10, north end of, at mileage 241.6, set vertically in concrete entrance on east side of track, about 4 feet above ground; red metal disk (U. S. C. & G. S. b. m. L–25)	1,143.561
Tunnel No. 10, concrete culvert at north entrance, west of track, center of "9" in 1907, culvert 241–E; surface within an outlined square (U. S. C. & G. S. b. m.) (S. P. b. m.)	1,139.594
Nova, Southern Pacific R. R. signpost at mileage 242.6, in center of west end of concrete culvert (with red railing) 242–G, mileage 242.8; red metal disk (U. S. C. & G. S. b. m. M–25)	1,032.685
Tunnel No. 11, north end of, at railroad mileage 245.9, set vertically in concrete, about 4 feet above ground, on east side of tracks; red metal disk (U. S. C. & G. S. b. m. N–25)	719.907
San Luis Obispo, 3.5 miles north of, at railroad mileage 248.5, in sandstone abutment of 930-foot deck plate-girder bridge over Steiner Creek, on west side of track; red metal disk (U. S. C. & G. S. b. m. O–25)	444.937
San Luis Obispo, 1.1 miles north of station, at milepost 250, in sandstone abutment of deck plate-girder bridge over Brizziolari Creek, on east side of track, culvert is 249–D; red metal disk (U. S. C. & G. S. b. m. P–25)	292.877
San Luis Obispo, undertrack road crossing, about 0.9 mile north of station, in top of retaining wall, about 4 feet above roadway and 20 feet below track; a Geological Survey bronze tablet, stamped "240 17 1916" (U. S. C. & G. S. b. m. I–25)	241.161
San Luis Obispo, about 9.6 miles north of station, at railroad mileage 251.5, in north stone abutment of plate girder overhead road crossing 251–G, on east side of track; surface within an outlined square on masonary (U. S. C. & G. S. b. m. Q–25)	251.213
San Luis Obispo, entrance to courthouse, east of steps to main entrance, about 4 feet above ground, top of concrete pillar; a Geological Survey tablet stamped "233 18 1916" (U. S. C. & G. S. b. m. R–25)	234.912
San Luis Obispo, at entrance to courthouse, similar to bench mark R–25 but on west side of entrance, about 4 feet above ground; bolt in top of concrete pillar (city b. m.)	234.005
San Luis Obispo, on northeast corner of Marsh and Morro streets, in northwest corner of First Presbyterian Church, on north side of corner, about 4 feet above ground, red metal disk set vertically (U. S. C. & G. S. b. m. S–25)	214.967

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	Feet
San Luis Obispo, at northeast corner of Higuerra and Garden streets, on front face of corner abutment of Union National Bank, about 4 feet above sidewalk; red metal disk (U. S. C. & G. S. b. m. T–25)	203.116
San Luis Obispo, 3.3 miles south of, near southwest base of Imlay Hill, east of stone railroad bridge 255–G; a Geological Survey bronze tablet stamped "232 18 1916" (U. S. C. & G. S. b. m. U–25)	225.892

Primary leveling by L. F. Biggs in 1916

From Asuncion south along Southern Pacific R. R. and highways to San Luis Obispo and south border of quadrangle. (Part of line double rodded and part leveled twice and corrected to agree with precise leveling of the U. S. C. & G. S. over same route)

Henry, 1 mile south of, west end of step leading to Southern Pacific depot; chiseled square marked "U. S. 857"	857.08
Henry, 1.0 mile south of, west end of concrete culvert 229–A; bridge 231–B; chiseled square marked "U. S. 907"	907.30
Eaglet, 0.3 mile north of, east end of stone abutment of concrete culvert 230–H; bronze tablet stamped "880 11 1916" (U. S. C. & G. S. A–25)	879.815
Eaglet, 1.4 miles south of, east end of south abutment of concrete bridge 231–B; chiseled square marked "U. S. 907"	907.30
Santa Margarita, 2.5 miles north of, on east end of south stone abutment of bridge 232–G; chiseled square marked "U. S 929"	930.38
Santa Margarita, 2.5 miles north of, 600 feet west of railroad culvert 232–G, on east end of south abutment of steel highway bridge over Santa Margarita Creek; bronze tablet stamped "931 12 1916" (U. S. C. & G. S. C–25)	931.668
Santa Margarita, 1.5 miles north of, on west end of north abutment of bridge 233–C; chiseled square marked "U. S. 956"	959.78
Santa Margarita, north end of town, on west end of south abutment of highway bridge; bronze tablet stamped "995 13 1916"	995.700
Santa Margarita, 0.9 mile south of, on north end of concrete culvert 236–D; chiseled square marked "U. S. 1,019"	1,019.35
Cuesta, 1.2 miles north of, on base of semaphore 2375; chiseled square marked "1,141 U. S."	1,141.37
Cuesta, 0.3 mile north of signboard, on east end of concrete culvert; chiseled square marked "U. S. 1,264"	1,265.09
Cuesta, opposite milepost 239, on east end of concrete highway culvert; bronze tablet stamped "1,314 14 1916" (U. S. C. & G. S. G–25)	1,305.286
Summit of Cuesta grade, 200 feet south of, on east side of concrete culvert; chiseled square marked "U. S. 1,540"	1,541.02
Summit of Cuesta grade, 1.1 miles south of, on east end of concrete culvert; chiseled square marked "U. S."	1,245.47
Summit of Cuesta grade, 2.0 miles south of, on east end of concrete bridge; bronze tablet stamped "994 15 1916"	994.703
Summit of Cuesta grade, 2.7 miles south of, 800 feet north of schoolhouse, on east end of concrete culvert; chiseled square marked "U. S. 807"	808.00
San Luis Obispo, 4.1 miles north of, on east end of north concrete abutment of culvert (P. L. Co. B. M. 47), painted "650"	650.20

	Feet
San Luis Obispo, 3.6 miles north of, opposite large farmhouse, on east end of concrete culvert; chiseled square marked "U. S. 577"	577.80
San Luis Obispo, 2.0 miles north of, opposite San Luis Obispo Water Works reservoir No. 3, on east end of concrete culvert; bronze tablet stamped "415 16 1916"	415.456
San Luis Obispo, north city limit, on south end of concrete culvert; chiseled square marked "U. S. 295"	296.14
San Luis Obispo, undertrack road crossing, in top of stone retaining wall; bronze tablet stamped "240 17 1916" (U. S. C. & G. S. I–25)	241.161
San Luis Obispo courthouse, east of steps to main entrance, in top of concrete pillar; bronze tablet stamped "233 18 1916" (U. S. C. & G. S. R–25)	234.012
San Luis Obispo, 20 feet north of railroad depot, on concrete curb; chiseled square marked "U. S. 245"	245.30
San Luis Obispo, 1 mile south of, on west end of stone culvert 252–B; chiseled square, marked "U. S. 239"	239.58
From San Luis Obispo northwest along highway to west border of quadrangle (leveled twice)	
San Luis Obispo, courthouse, previously described	234.012
San Luis Obispo, west end of town, on north abutment of highway bridge over Brizziolari Creek; chiseled square marked "U. S. 231"	231.93
San Luis Obispo, 1.8 miles northwest of, on west side of concrete highway bridge; chiseled square marked "U. S. 332"	333.02
San Luis Obispo, 3.7 miles northwest of, north end of east abutment of Chorro Creek highway bridge; bronze tablet stamped "392 22 1916"	392.962
San Luis Obispo, 5.6 miles northwest of, 0.5 mile north of Hope School, on east end of stone bridge; chiseled square marked "U. S. 273"	273.62
San Luis Obispo, 6.5 miles northwest of, at gate leading to house, on top of granite post; chiseled square marked "U. S. 259"	259.74
Primary leveling by N. E. Ballmer in 1918	
From Santa Margarita southeast along highways to Pozo quadrangle	
Santa Margarita, north end of town, in west end of south abutment of highway bridge; bronze tablet stamped "995 13 1916"	995.700
Santa Margarita, 0.75 mile east of, on south side of road at summit, in base of stump; spike; "U. S. B. M. 1,096" marked on fence post	1,096.46
Santa Margarita, 1.47 miles east of, 300 feet west of T road north, in northeast abutment of bridge; spike; "U. S. B. M. 1,009" painted on bridge rail	1,010.25
Santa Margarita, 2.64 miles southeast of, on south side of road, in telephone pole; spike; "U. S. B. M. 1,103" painted on telephone pole	1,104.19
Santa Margarita, 2.64 miles southeast of, south side of road, 50 feet southeast of telephone pole painted "U. S. B. M. 1,103"; iron post stamped "1,106"	1,107.670
Santa Margarita, 3.72 miles southeast of, on south side of road, in telephone pole; spike; "U. S. B. M. 1,178" painted on telephone pole	1,178.72

	Feet
Santa Margarita, 4.80 miles southeast of, 30 feet north of lane turning west, on west side of road, in telephone pole; spike; "U. S. B. M. 1,133" painted on telephone pole	1,134.46
Santa Margarita, 5.07 miles southeast of, center of road forks; ground, "1,113" painted on fence post	1,113.99
Santa Margarita, 6.06 miles east of, on east side of road at turn, in telephone pole; spike, "U. S. B. M. 1,172" painted on telephone pole	1,169.88
Santa Margarita, 6.06 miles east of, on east side of road at turn, 20 feet east of temporary bench mark on pole; iron post stamped "1,172"	1,170.493
Santa Margarita, 7.17 miles southeast of, 100 feet south of lane west, on west side of road, in big oak tree; spike; "U. S. B. M. 1,230" painted on big oak tree	1,227.81
Santa Margarita, 7.63 miles southeast of, in front of Rinconada School; center of road in front of gate; "1,257" painted on gate	1,255.08
Santa Margarita, 8.04 miles southeast of, at road forks, on south side of road, in telephone pole; spike; "U. S. B. M. 1,285" painted on telephone pole	1,283.56
Santa Margarita, 9.09 miles southeast of, on north side of road, on large rock; chiseled cross, "U. S. B. M. 1,380" painted on large rock	1,377.81
Santa Margarita, 9.60 miles southeast of, 8.76 miles northwest of Pozo, Salinas River bridge, on south wing of west abutment; chiseled square, "U. S. B. M. 1,235" painted on bridge railing	1,235.82

From Pozo quadrangle northwest along highways across San Luis Obispo quadrangle near its northeast corner into Paso Robles quadrangle

Creston, 2.55 miles southeast of, opposite lane turning west, in tree on east side of road; spike, "U. S. B. M. 1,181" painted on fence post	1,180.71

SAN MIGUEL QUADRANGLE

[Latitude 35° 45′–36°; longitude 120° 30′–120° 45′]

MONTEREY AND SAN LUIS OBISPO COUNTIES

Precise leveling by U. S. Coast and Geodetic Survey in 1919

Southeast along Southern Pacific R. R.

	Feet
Bradley, 5.2 miles southeast of, at railroad mileage 200.6, in east end of north abutment of steel railroad bridge 200–B over Salinas River; bronze tablet stamped "565 1 1916," (U. S. C. & G. S. b. m. Q–23)	565.189
Bradley, 6 miles south of, 4 meters west of center line of track, 1 meter below, railroad mileage 202.0, in west head wall of concrete culvert 202–A; red metal disk (U. S. C. & G. S. b. m. R–23)	586.357
San Miguel, 3.8 miles north of, 1,000 feet south of San Luis Obispo and Monterey county line, in east end of south abutment of concrete bridge 203–A; U. S. G. S. bronze tablet stamped "590 2 1916" (U. S. C. & G. S. b. m. S–23)	590.724
San Miguel, 3.2 miles north of, directly opposite railroad Y, 18 meters west of center line of track, 2 meters below, railroad mileage 203.8, in east head wall of highway concrete box culvert; red metal disk (U. S. C. & G. S. b. m. T–23)	586.052

	Feet
San Miguel, 2.8 miles north of, railroad mileage 204.6, on east end of concrete culvert 204–B; chiseled square marked "U. S. 593" (U. S. C. & G. S. b. m. U–23)	593.303
San Miguel, 2 miles north of, railroad mileage 205.2, on east end of concrete culvert 205–A; chiseled square marked "U. S. 602"	602.781
San Miguel, 3.2 miles north of, 3 meters east of track, 0.5 meter below, railroad mileage 205.6, in east head wall of highway concrete box culvert 205–B; red metal disk (U. S. C. & G. S. b. m. W–23)	607.771
San Miguel, at east edge of Southern Pacific R. R. park, 300 feet north of station, just east of band platform, 25 meters west of center line of track, level with track, railroad mileage 207.1, on concrete post; red metal disk (U. S. C. & G. S. b. m. X–23)	620.937
San Miguel, 30 feet east of south end of Southern Pacific R. R. depot, railroad mileage 207.0, on concrete base of southeast pillar of railroad water tank; chiseled square marked "U. S. 622" (U. S. C. & G. S. b. m. Y–23)	622.404

Primary leveling by W. H. Monahan in 1908

From point 4 miles east of Bradley northeast to Stone Canyon

Bradley, 4.1 miles east of, north of road, at base of hill, in large oak tree; spike with aluminum tag stamped "892"	892.26
Bradley, 4.9 miles east of, north of road, 100 feet east of large oak tree, on line fence; iron post stamped "1026"	1,026.464
Bradley, 6.1 miles northeast of, south of road, in base of small oak tree; spike with aluminum tag stamped "1256"	1,257.05
Bradley, 8 miles northeast of, north of railroad, 1,000 feet east of road crossing, in telegraph pole; spike with aluminum tag stamped "1008"	1,008.31
Bradley, 9.1 miles northeast of, north of railroad, 0.5 mile east of the Hamilton ranch dwelling, in telegraph pole; spike with aluminum tag stamped "1074"	1,074.17
Bradley, 10.2 miles northeast of, south of railroad, 10 feet west of large oak tree; iron post stamped "1125–Cal–1908–B"	1,125.210
Bradley, 11.3 miles northeast of, north of railroad, 100 feet north of railroad cut and 100 feet south of Indian Creek, in telegraph pole; spike with aluminum tag stamped "1171"	1,171.27
Bradley, 13 miles northeast of, north of railroad, 100 feet north of road crossing, in telegraph pole; spike with aluminum tag stamped "1273"	1,273.73
Bradley, 14.2 miles northeast of, north of railroad, between highway and railroad, 100 feet east of road and railroad bridge, in telegraph pole; spike with aluminum tag stamped "1343"	1,343.19
Bradley, 15 miles northeast of, south of road, 100 feet north of railroad and 15 feet south of small oak tree on south side of road, 100 feet north of gulch, 1,800 feet north of oil derrick; iron post stamped "1908–Cal–1432–B"	1,432.305
Bradley, 16.1 miles northeast of, south of track, 1,000 feet southwest of small house on north side of track, in telegraph pole; spike with aluminum tag stamped "1523"	1,523.71
Bradley, 17.3 miles northeast of, north of railroad, 150 feet east of gulch on north, in telegraph pole; spike with aluminum tag stamped "1614"	1,614.58

	Feet
Bradley, 18.3 miles northeast of, east of railroad, 16 feet north of stream and railroad bridge, 100 feet east of road bridge and small house on west, in telegraph pole; spike with aluminum tag stamped "1695"	1,695.76
Bradley, 20.7 miles northeast of, 200 feet west of power house at summit of mountain, 200 feet west of elevated railroad, on stone; chiseled square and aluminum tag stamped "2710"	2,710.98
Stone Canyon, south side of mine railroad, 50 feet north of road, 400 feet west of opening of the Stone Canyon Consolidated Coal Co.'s mine, 300 feet north of company store, in large stone, aluminum tablet stamped "1908–Cal–2773–B"	2,774.064

Near San Ardo

San Ardo, 2.3 miles southeast of, east of railroad, in telegraph pole; spike with aluminum tag stamped "445"	443.27
San Ardo, 3.1 miles southeast of, east of track, in corner of culvert under railroad; aluminum tablet stamped "466–B" (C. & G. S., 1920)	465.780

Primary leveling by L. F. Biggs in 1916. Corrected to agree with the 1920 precise level line of the U. S. C. & G. S. over same route

From Nacimiento southeast along Southern Pacific R. R. to point near San Miguel (double-rodded line)

San Miguel, 5.5 miles north of, on east end of south abutment of concrete culvert 202–B; chiseled square marked "U. S. 591"	591.45
San Miguel, 3.8 miles north of, 1,000 feet south of San Luis Obispo and Monterey county line, east end of south abutment of concrete bridge 203–A; bronze tablet stamped "590 2 1916" (U. S. C. & G. S. S–23)	590.724
San Miguel, 2.8 miles north of, east end of concrete culvert 204–B; chiseled square marked "U. S. 593," (U. S. C. & G. S. U–23)	593.303
San Miguel, 2.0 miles north of, east end of concrete culvert 205–A; chiseled square marked "U. S. 602" (U. S. C. & G. S. V–23)	602.781
San Miguel depot, 0.9 mile north of, west end of concrete highway culvert; bronze tablet stamped "616 3 1916"	616.447
San Miguel, 30 feet east of south end of Southern Pacific R. R. depot, on concrete base of southeast pillar of railroad water tank; chiseled square marked "U. S. 622" (U. S. C. & G. S. Y–23)	622.404

Primary leveling by R. C. Seitz in 1917

From south border northeast along highways across southeast quarter of quadrangle

Estrella Bridge, 5.42 miles northeast of, in base of telephone pole, at gate to ranch; spike, painted "U. S. 1,142 B. M."	1,142.00
Estrella Bridge, 6.50 miles northeast of, 60 feet south of entrance to ranch, near east fence line of road; iron post stamped "1,193 1917" (reset and remarked by L. F. Biggs in 1918)	1,193.804
Estrella Bridge, 7.75 miles northeast of, at bend in road on flat, in base of leaning telephone pole; spike, painted "U. S. 1,287 B. M."	1,290.10

	Feet
Estrella Bridge, 8.77 miles northeast of, 0.60 mile south of T road west, on east side of road, in base of leaning telephone pole; spike, painted "U. S. 1,359 B. M."	1,362.54
T road west to San Miguel road	1,410.9
Estrella Bridge, 10.0 miles northeast of, 9.97 miles south of Parkfield, 0.70 mile north of junction of Paso Robles and San Miguel roads, on east fence line of road; iron post stamped "1,471 1917"	1,473.928
Parkfield, 8.96 miles south of, at northeast corner of school yard, in base of telephone pole; spike, painted "U. S. 1,577 B. M."	1,580.37
Parkfield, 7.96 miles south of, on west side of road, in base of telephone pole; spike, painted "U. S. 1,696 B. M."	1,699.56

From east border of quadrangle west along highway to point 18.3 miles east of Bradley

Parkfield, 4.10 miles northwest of, 400 feet west of 60-inch oak tree that stands in center of roadway, in base of telephone pole; spike, painted "U. S. 1,818 B. M."	1,823.60
Parkfield, 4.6 miles northwest of, at Innesdale rancho, at base of gate; top of rock	1,847.14
Parkfield, 5 miles northwest of, T road southwest to San Miguel, in southeast angle, in base of telephone pole; spike, painted "U. S. 1,855 B. M."	1,861.18
Parkfield, 6.20 miles northwest of, 0.40 mile west of Innesdale School, on south fence line of road; 5-inch stove pipe filled with concrete and capped with a bronze tablet stamped "1,973 1917"	1,973.708
Parkfield, 7.25 miles northwest of, opposite triangular plot of land containing four oak trees, in base of telephone pole; spike, painted "U. S. 2,054 B. M."	2,059.81
Parkfield, 8.40 miles northwest of, 0.60 mile west of small bridge, 900 feet east of drain, on west slope of small hill, on north side of road, in base of fence post; spike, painted "U. S. 2,105 B. M."	2,110.75
Parkfield, 9.50 miles northwest of, about 1,200 feet east of S. L. Wool's house, 30 feet south of road, in root of 24-inch oak tree; spike, painted "U. S. 2,134 B. M."	2,139.66
Parkfield, 10.70 miles northwest of, 0.80 mile west of S. L. Wool's house, 0.73 mile southeast of summit between Indian and Cholame valleys, 15 feet east of road, 5-inch stove pipe filled with concrete and capped with a bronze tablet stamped "2,211 1917"	2,211.906
Summit of road between Indian and Cholame valleys	2,378.7
Parkfield, 11.80 miles northwest of, 0.40 mile west of summit of water tanks on Stone Canyon R. R., can be seen for first time after descending from summit, in oak tree on west edge of road; roofing nail, painted "U. S. 2,234 B. M."	2,234.85

DEGREE QUADRANGLE 35°–36°, 121°–122°

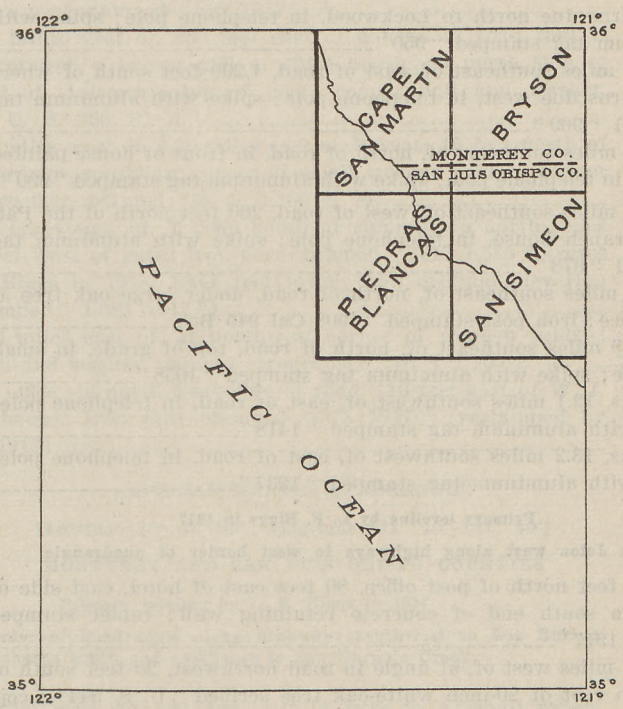


FIGURE 24.—Diagram of degree quadrangle 35°–36°, 121°–122°

BRYSON QUADRANGLE

[Latitude 35° 45′–36°; longitude 121°–121° 15′]

MONTEREY AND SAN LUIS OBISPO COUNTIES

Primary leveling by W. H. Monahan in 1908

From point 5 miles north of Jolon along highway south and east to point 9 miles west of Bradley

	Feet
San Lucas, 14.7 miles southwest of, at junction of roads, 0.75 mile west of Lockwood; iron post stamped "1908 Cal 1104 B"	1,104.229
San Lucas, 16.2 miles southwest of, south of road, in telephone pole; spike with aluminum tag stamped "1014"	1,014.27
San Lucas, 17.1 miles southwest of, north of road, 500 feet from white house at foot of hill, in telegraph pole; spike with aluminum tag stamped "1023"	1,023.34

	Feet
Jolon, at east edge of town, in forks of roads, 3 feet east of signpost which reads "Bradley 25 miles; Pleyto 14.5 miles; San Lucas 19.5 miles"; iron post stamped "1908 Cal 959 B"	959.300
Jolon, 1.9 miles south of, in field 25 feet south of road, in large oak tree; spike with aluminum tag stamped "924"	924.76
Jolon, 4.9 miles southeast of, south of road, 650 feet northeast of white house; iron post stamped "1908 Cal 949 B"	949.590
Jolon, 5.9 miles southeast of, south of road, 1,400 feet east of where road turns due north to Lockwood, in telephone pole; spike with aluminum tag stamped "950"	950.67
Jolon, 6.8 miles southeast of, east of road, 1,200 feet south of where road turns due west, in telephone pole; spike with aluminum tag stamped "969"	969.16
Jolon, 8.1 miles southeast of, north of road, in front of house painted brown, in telephone pole; spike with aluminum tag stamped "990"	990.53
Jolon, 8.9 miles southeast of, west of road, 200 feet north of the Patterson ranch house, in telephone pole; spike with aluminum tag stamped "978"	978.11
Jolon, 10 miles southeast of, north of road, under large oak tree at line fence; iron post stamped "1908 Cal 945 B"	945.805
Jolon, 10.9 miles southeast of, north of road, top of grade, in small oak tree; spike with aluminum tag stamped "1058"	1,058.18
San Lucas, 12.1 miles southwest of, east of road, in telephone pole; spike with aluminum tag stamped "1418"	1,418.47
San Lucas, 13.2 miles southwest of, east of road, in telephone pole; spike with aluminum tag stamped "1237"	1,237.18

Primary leveling by L. F. Biggs in 1917

From Jolon west along highways to west border of quadrangle

Jolon, 60 feet north of post office, 80 feet east of hotel, east side of road, in south end of concrete retaining wall; tablet stamped "979 1 1917"	978.710
Jolon, 1.1 miles west of, at angle in road northwest, 20 feet south of road, in root of 20-inch white-oak tree scribed "U. S. 944"; copper nail	944.36
Jolon, 2.5 miles west of, on south side of road, in base of 30-inch white-oak tree scribed "U. S. 971"; copper nail	971.32
Jolon, 3.5 miles west of, 60 feet east of large gate of Gorda Road, south edge of road; iron post stamped "992 2 1917"	992.179
Jolon, 4.4 miles west of, 0.5 mile west of San Antonio River, 30 feet north of road, in base of 28-inch white-oak tree scribed "U. S. 1,003"; copper nail	1,003.15

From Jolon north along highways to north border of quadrangle. (Part of an unadjusted line closing +1.2 feet at junction of Marble Peak to Tassajara Hot Springs trail with Lost Valley trail)

Jolon, at east edge of town, 3 feet east of signpost which reads "Bradley 25 miles, Pleyto 14.5 miles, San Luis 19.5 miles"; iron post stamped "959 B 1908 Cal." (Bull. 481, p. 73, +0.2)	959.300
Jolon, 60 feet north of post office, 80 feet east of hotel, east side of road, in south end of concrete retaining wall; tablet stamped "979 1 1917"	978.710
Jolon, 1.5 miles north of, 60 feet north of small bridge, east edge of road, in root of 30-inch oak tree scribed "U. S. 1,048"; copper nail	1,048.15

Primary leveling by R. C. Seitz in 1917 and L. F. Biggs in 1917–18

From Pleyto southwest along highways to Bryson (leveled twice)

	Feet
Pleyto, 1.12 miles west of, at forks of road, bottom of brace at south end of gate; copper nail and washer, painted "U. S. 744 B. M."	743.88
Pleyto, 2.24 miles west of, 10 feet north of road, top of low burnt stump; copper nail and washer, painted "U. S. 809 B. M."	809.26
Pleyto, 3.34 miles west of, 800 feet south of wooden bridge, near east fence; iron post stamped "882 1917"	882.450
Pleyto, 4.30 miles west of, 200 feet east of a bend in road that is halfway between a brown and a white house, on north side of upper end of sluiceway, top of post; copper nail and washer, painted "U. S. 956 B. M."	955.04
Pleyto, 5.30 miles west of, 3.30 miles east of Bryson, 15 feet north of watering trough, southeast corner of small wooden bridge; copper nail and washer, painted "U. S. 1,169 B. M."	1,168.91
Bryson 2.53 miles east of, T road south at summit, on north fence line, 10 feet west of gate; iron post stamped "1917 1,585" (reset by L. F. Biggs in 1918, 1.147 feet lower than original elevation and restamped "1,585 1917")	1,585.917
Bryson, 1.46 miles east of, at northwest corner of wooden bridge; copper nail and washer, painted erroneously "U. S. 1,100 B. M."	1,090.93
Bryson post office, on north fence line of road, 110 feet east of W. J. Kenton's house; iron post stamped "978 1917" (restamped by Biggs in 1918)	978.742

CAPE SAN MARTIN QUADRANGLE

[Latitude 35° 45′–36°; longitude 121° 15′–121° 30′]

MONTEREY AND SAN LUIS OBISPO COUNTIES

Primary leveling by L. F. Biggs in 1917

From east border of quadrangle along highways southwest to Los Burros, thence south and southeast to San Carpojo Creek

	Feet
Jolon, 5.7 miles west of, 900 feet east of gate to Newhall ranch, north edge of road, in root of 20-inch oak tree scribed "U. S. 1,077"; copper nail	1,076.93
Jolon, 7.2 miles west of, 500 feet west of saddle between San Antonio and Nacimiento rivers, south edge of road; aluminum tablet in flat sandstone boulder, stamped "1,358 1917 3"	1,358.408
Jolon, 8.1 miles west of, 300 feet west of Rock Creek crossing, 40 feet north of road at forks, in root of 60-inch white-oak tree scribed "U. S. 1,287"; copper nail	1,287.24
Jolon, 9.1 miles west of, 1.5 miles east of Moore's Camp, north edge of road, in base of 36-inch white-oak tree scribed "1,237"; copper nail	1,237.46
Jolon, 9.8 miles west of, 1,200 feet north of Leon ranch house, 200 feet west of Nacimiento River, between river and San Miguel Creek, at north edge of road; iron post stamped "1,222 4 1917"	1,222.352
Jolon, 10.7 miles west of, south edge of road at Moore's Camp, in root of large white-oak tree scribed "U. S. 1,243"; copper nail	1,243.36
Moore's Camp, 1 mile west of, at trail forks, at base of tree with sign "Los Burros-Gorda"; summit of boulder, tree scribed "U. S. 1,294"	1,294.04

	Feet
Moore's Camp, 2 miles west of, 300 feet south of stream crossing, at old trail forks, in base of 16-inch oak tree scribed "U. S. 1,472"; copper nail	1,471.82
Moore's Camp, 2.2 miles west of, 0.2 mile west of crossing on south fork of San Miguel Creek, 100 feet east of switchback, at south edge of trail, in large boulder; aluminum tablet stamped "1,647 25 1917"	1,647.030
Moore's Camp, 3.2 miles west of, north edge of trail at summit of ridge, 2 feet above ground in very small pine tree; copper nail, aluminum tag stamped "2,133"	2,133.70
Moore's Camp, 4.1 miles west of, 20 feet north of trail, in root of 20-inch pine tree scribed "U. S. 2,428"; copper nail	2,428.60
Moore's Camp, 5 miles west of, 10 feet west of trail at spring, in root of small live-oak tree; copper nail, aluminum tag stamped "2,849"	2,849.84
Moore's Camp, 5.3 miles west of, 400 feet south of saddle, 10 feet south of trail, in summit of large boulder; aluminum tablet stamped "3,127 26 1917"	3,127.347
Moore's Camp, 6 miles west of, 3.3 miles northeast of Los Burros, north edge of trail, in base of 14-inch live-oak tree scribed "U. S. 3,287"; copper nail	3,287.77
Los Burros, 2.3 miles northeast of, west edge of trail, in root of 18-inch pine tree scribed "U. S. 3,414"; copper nail	3,414.37
Los Burros, 1.3 miles northeast of, 20 feet north of trail, in root of large yellow-pine tree, scribed "U. S. 3,274"; copper nail	3,274.35
Los Burros, 0.7 mile north of, at trail forks to Gorda, north edge of trail, in base of small oak tree; copper nail, aluminum tag stamped "3,162"	3,162.92
Los Burros, 800 feet north of Jim Kunkle's house, south edge of trail, in summit of boulder; aluminum tablet stamped "2,673 1917 27"	2,673.211
Los Burros, 0.7 mile south of, south edge of trail, north bank of Alder Creek, in base of 18-inch live-oak tree, scribed "U. S. 2,122"; copper nail	2,122.40
Los Burros, 2 miles south of, at junction of Coast and Los Burros trails, on small boulder, blazed tree 30 feet south of boulder scribed "U. S. 1,681"; chiseled point	1,681.18
Los Burros, 3.1 miles south of, 0.5 mile southwest of Villa Creek crossing, 300 feet west of old Morris cabin, south edge of trail, at point; aluminum tablet in face of boulder stamped "1,308 29 1917"	1,308.318
Villa Creek, 2 miles south of, at Evans cow camp, on rock at northeast corner of shed; chiseled point, chiseled "U. S."	952.04
Evans Brothers cow camp, 1 mile south of, 300 feet south of wire gate at east edge of trail, summit of boulder; chiseled circle, chiseled "U. S."	806.19
Evans Brothers cow camp, 2 miles south of, 2.5 miles north of Salmon Creek, east edge of trail, at small saddle; aluminum tablet in boulder, stamped "750 30 1917"	749.765
Salmon Creek, 1.5 miles north of, 30 feet west of trail, in root of 36-inch sycamore tree scribed "U. S. 896"; copper nail	896.46
Salmon Creek, 0.7 mile north of, 60 feet south of junction of upper and lower trails; chiseled point on flat boulder, chiseled "U. S. 887"	886.72

	Feet
Salmon Creek crossing, 0.5 mile south of, east edge of trail, in face of large boulder; aluminum tablet stamped "506 1917 31"	506.367
Salmon Creek, 2.1 miles south of, east edge of trail; summit of rock chiseled "U. S. 526"	526.36
Salmon Creek, 4.1 miles south of, 1 mile north of San Carpojo Creek, 15 feet east of A. D. Russ's ranch house; nail in top of eucalyptus stump, aluminum tag stamped "310"	310.28

Primary leveling by R. C. Seitz in 1917

Near San Carpojo Creek

San Carpojo Creek, 0.28 mile north of, 0.25 mile north of Coan Brothers' ranch house, on rock 8 feet west of road and 5 feet south of north gate of ranch; chiseled mark, painted "U. S. 155 B. M"	155.33
San Carpojo Creek, 40 feet west of Evans Brothers' ranch house, on north bank of creek, rock in center of road; aluminum tablet stamped "34 1917"	34.873
San Carpojo Creek, 1.22 miles south of Evans power ranch by upper road, 0.5 mile southwest of crossing of San Carpojo Creek, top of rock at south edge of upper road; chiseled mark painted (erroneously) "U. S. 184 B. M."	206.33

PIEDRAS BLANCAS QUADRANGLE

[Latitude 35° 30′–35° 45′; longitude 121° 15′–121° 30′]

SAN LUIS OBISPO COUNTY

Primary leveling by R. C. Seitz in 1917

From point near Piedras Blancas Lighthouse northwest along highway

	Feet
San Simeon, 4.62 miles north of, 1.4 miles east of Piedras Blancas Lighthouse, north truss of wooden bridge; top of stay bolt at base of east end, painted "U. S. 23 B. M."	24.18
Piedras Blancas L. H., 3,000 feet east of, top of small rock, 10 feet north of road, at top of knoll; chiseled mark, painted "U. S. 98 B. M."	99.44
Piedras Blancas L. H., 1.20 miles north of, 800 feet south of Washington School, at east side of drain, 70 feet south of road, in top of small boulder; bronze tablet stamped "13 1917"	13.960
Piedras Blancas L. H., 2.37 miles north of, 40 feet west of road, opposite gate post (remains of fence), top of sawed-off fence post; copper nail and washer, painted "U. S. 29 B. M."	30.24
Piedras Blancas L. H., 3.33 miles north of, 180 feet south of Arroyo La Cruz, 25 feet west of road, 27 feet south of "No camping" sign; copper nail and washer in top of stake painted "U. S. 7 B. M."	7.48
Piedras Blancas L. H., 4.65 miles north of, 1.30 miles north of Arroyo La Cruz, on south side of Arroyo de Los Chinos, 96 feet south of road; 24-inch vitrified drain pipe set 2 feet in ground, filled with concrete and capped with a bronze tablet not stamped	101.410
Piedras Blancas L. H., 5.60 miles north of, 1,830 feet south of Magee dairy-ranch house, 8 feet west of road, in base of corner fence post; copper nail and washer, painted "U. S. 118 B. M."	118.34

SAN SIMEON QUADRANGLE

[Latitude 35° 30′–35° 45′; longitude 121°–121° 15′]

SAN LUIS OBISPO COUNTY

Primary leveling by R. C. Seitz in 1917 and by L. F. Biggs in 1918

From southeast corner of quadrangle northwest along highways to Cambria (leveled twice)

	Feet
Cambria, 6.38 miles southeast of, 650 feet south of barn and windmill, 5 feet west of road, on rock flush with surface of ground; bronze tablet stamped "254 1917"	254.149
Cambria, 5.83 miles southeast of, at head of Harmony Valley; summit of road	305.0
Cambria, 5.63 miles southeast of, 170 feet north of Harmony post office, on north end of west retaining wall of culvert; chiseled mark, painted "U. S. 180 B. M."	180.44
Cambria, 4.85 miles southeast of, at private road northwest, 5 feet east of north end of gate, top of rock; chiseled mark, painted "U. S. 134 B. M."	134.41
Cambria, 4.64 miles southeast of, T road east to Green Valley; center of road	108.7
Cambria, 3.61 miles southeast of, 800 feet north of Green Valley road, 30 feet east of and about 15 feet below road, in top of large boulder; bronze tablet stamped "130 1917"	129.832
Cambria, 2.86 miles southeast of, private road west; center of road	97.9
Cambria, 2.29 miles southeast of, 425 feet north of white house, 10 feet east of road, top of north end of stone retaining wall; chiseled mark, painted "U. S. 107 B. M."	106.93
Cambria, 1.74 miles southeast of; top of hill	301.9
Cambria, 1.27 miles southeast of, 10 feet east of road, on top of boulder; chiseled mark, painted "U. S. 244 B. M."	244.16
Cambria, 0.64 mile southeast of, at bend in road, at top of first grade out of Cambria	281.0
Cambria, at south end of iron bridge over Santa Rosa Creek, in south side of west end of retaining wall; bronze tablet stamped "59 1917"	59.055
Cambria, road forks at west side of town, sidewalk 1 foot from building in northwest angle; copper nail and washer	63.004

Primary leveling by R. C. Seitz in 1917

From Cambria northwest along highways to west border of quadrangle

Cambria, 0.81 mile west of, 960 feet north of right-angled bend and private road, on rock at east edge of road; chiseled mark, painted "U. S. 62 B. M."	61.91
Road south to wharf	18.1
Cambria, 1.79 miles northwest of, at bend where highway turns to parallel coast line, rock at east end of culvert; chiseled mark, painted "U. S. 27 B. M."	27.26
Cambria, 2.77 miles northwest of, 300 feet south of creek, on Leffingwell ranch, top of boulder; bronze tablet stamped "20 1917"	20.506

	Feet
Cambria, 3.90 miles northwest of, concrete bridge over San Simeon Creek, floor at northeast corner; chiseled mark, painted "U. S. 15 B. M."	16.23
Cambria, 5.14 miles northwest of, 5.17 miles south of San Simeon, top of retaining wall at northwest corner of rock culvert; chiseled mark, painted "U. S. 86 B. M."	86.90
San Simeon, 3.97 miles southeast of, 500 feet north of R. Mitchell's house, on north side of bridge over Pico Creek, in top of concrete rail; bronze tablet stamped "30 1917"	30.920
San Simeon, 2.96 miles southeast of, 30 feet south of small wash, 50 feet east of road, top of rock at east side of pile of rocks; chiseled mark, painted "U. S. 49 B. M."	50.03
San Simeon, 1.81 miles southeast of, 30 feet south of road, opposite gate, on small boulder flush with surface of ground; chiseled mark, painted "U. S. 93 B. M."	94.42
San Simeon, 0.78 mile southeast of, 40 feet northwest of bridge, in base of large boulder; chiseled mark, painted "U. S. 16 B. M."	16.64
San Simeon, east part of town, bridge over Arroyo del Puerto, top of center of south concrete wall; bronze tablet stamped "19 1917"	20.269
San Simeon, 1.10 miles northwest of, at bottom of north end of west truss of bridge; top of stay bolt, painted "U. S. 45 B. M."	45.89
San Simeon, 2.19 miles northwest of, at southeast corner of bridge, about 500 feet north of shore of Pacific Ocean, in top of 8 by 10 inch post; copper nail and washer, painted "U. S. 16 B. M."	16.95
San Simeon, 3.21 miles northwest of, at north edge of road, 5 feet west of north end of galvanized iron culvert, where road makes a right-angled bend, in top of rock; chiseled mark, painted "U. S. 19 B. M."	19.48
San Simeon, 3.75 miles northwest of, 100 feet west of fisherman's cabin, 30 feet west of small drain, 20 feet south of road, in top of 3 by 5 foot rock; bronze tablet stamped "30 1917"	30.708

Primary leveling by R. C. Seitz in 1917 and by L. F. Biggs in 1918

From Cambria northeast along highways toward Klau School to east border of quadrangle (leveled twice)

Cambria, 1.08 miles east of, near white house, 10 feet north of road, top of rock; chiseled mark, painted "U. S. 92 B. M."	92.31
Cambria, 2.06 miles east of, in front of slate-colored house, in floor at northwest corner of bridge; copper nail and washer, painted "U. S. 130 B. M."	130.47
Cambria, 2.99 miles east of, in front of Santa Rosa School, 10 feet north of road, in large boulder; bronze tablet stamped "197 1917"	200.034
Cambria, 4.02 miles east of, in northeast angle at entrance to large white ranch house, in root of 36-inch pepper tree; copper nail and washer, painted "U. S. 229 B. M."	231.97
Cambria, 5.08 miles east of, at northeast corner of bridge over Oceanic Mine Creek, in top of piling; copper nail and washer, painted erroneously "U. S. 247 B. M."	267.17

DEGREE QUADRANGLE 36°–37°, 116°–117°

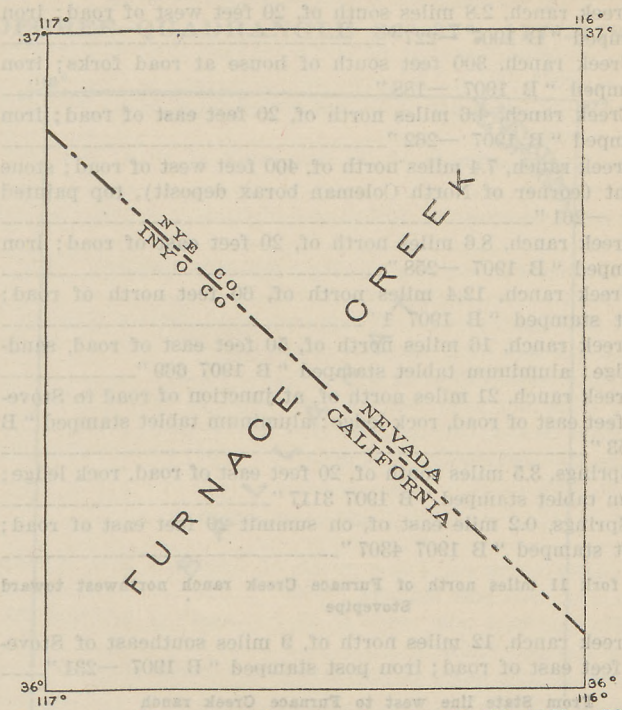


FIGURE 25.—Diagram of degree quadrangle 36°–37°, 116°–117°

FURNACE CREEK QUADRANGLE

[Latitude 36°–37°; longitude 116°–117°]

INYO COUNTY

Primary leveling by L. F. Biggs in 1907

North through Death Valley to State line near Daylight Springs

	Feet
Bennett's well, 7.2 miles south of, 40 feet east of Mesquite Wells; iron post stamped "B 1907 —244"	[1] —245.513
Bennett's well, 4.2 miles south of, 20 feet east of road; iron post stamped "B 1907 —248"	—249.615
Bennett's well, 20 feet east of; iron post stamped "B 1907 —276"	[2] —267.484
Bennett's well, 3.5 miles north of, 20 feet east of road; iron post stamped "B 1907 —260"	—251.340
Bennett's well, 7 miles north of, 20 feet east of road; iron post stamped "B 1907 —253"	—245.053

[1] Elevations having the minus sign are below sea level.

[2] Lowest point is about 3 miles east, 276 feet below sea level (no mark).

	Feet
Bennett's Well, 10.1 miles north of, 20 feet east of road; iron post stamped "B 1907 —263" [3]	—254.551
Furnace Creek ranch, 8.6 miles south of, 20 feet east of road, in borax flat; iron post stamped "B 1907 —284"	—275.333
Furnace Creek ranch, 5.9 miles south of, 20 feet east of road; iron post stamped "B 1907 —233"	—224.329
Furnace Creek ranch, 2.8 miles south of, 20 feet west of road; iron post stamped "B 1907 —227"	—218.758
Furnace Creek ranch, 300 feet south of house at road forks; iron post stamped "B 1907 —188"	—179.557
Furnace Creek ranch, 4.6 miles north of, 20 feet east of road; iron post stamped "B 1907 —262"	—254.620
Furnace Creek ranch, 7.4 miles north of, 400 feet west of road; stone monument (corner of North Coleman borax deposit), top painted "USBM —261"	—252.611
Furnace Creek ranch, 8.6 miles north of, 20 feet east of road; iron post stamped "B 1907 —258"	—249.889
Furnace Creek ranch, 12.4 miles north of, 60 feet north of road; iron post stamped "B 1907 1"	9.429
Furnace Creek ranch, 16 miles north of, 50 feet east of road, sandstone ledge; aluminum tablet stamped "B 1907 669"	676.927
Furnace Creek ranch, 21 miles north of, at junction of road to Stovepipe, 20 feet east of road, rock ledge; aluminum tablet stamped "B 1907 2253"	2,261.645
Daylight Springs, 3.5 miles south of, 20 feet east of road, rock ledge; aluminum tablet stamped "B 1907 3117"	3,123.712
Daylight Springs, 0.2 mile east of, on summit 20 feet east of road; iron post stamped "B 1907 4307"	4,315.919
From road fork 11 miles north of Furnace Creek ranch northwest toward Stovepipe	
Furnace Creek ranch, 12 miles north of, 9 miles southeast of Stovepipe, 20 feet east of road; iron post stamped "B 1907 —231"	—232.936
From State line west to Furnace Creek ranch	
Kings Springs, 12 miles west of, at junction of roads; iron post stamped "B 1907 2101"	2,100.539
Kings Springs, 13.2 miles west of, 1.7 miles north of Nelson's mill No. 2, 20 feet west of road; iron post stamped "B 1907 2117"	2,116.347
Nelson's well No. 2, 200 feet west of; iron post stamped "B 1907 2180	2,178.779
Nelson's well No. 2, 4.5 miles west of, 20 feet south of road; iron post stamped "B 1907 2572"	2,571.457
Summit, 1. 5 miles east of, 20 feet south of road, boulder; aluminum tablet stamped "B 1907 2864"	2,863.646
Summit, 20 feet south of road; iron post stamped "B 1907 3041"	3,040.543
Smith Tank, 5.6 miles east of, 20 feet south of road, rock ledge; aluminum tablet stamped "B 1907 2701"	2,700.337
Smith Tank, 1.4 miles east of, at junction of Greenwater road, 20 feet north of road; iron post stamped "B 1907 1938"	1,937.867
Smith Tank, 2.1 miles west of, 8.1 miles east of Furnace Creek, 30 feet south of road, boulder; aluminum tablet stamped "B 1907 1330"	1,329.861
Furnace Creek, 2.5 miles east of, at spring (head of Furnace Creek), 40 feet north of road; iron post stamped "B 1907 283"	282.262

[3] Elevations having the minus sign are below sea level.

DEGREE QUADRANGLE 36°–37°, 117°–118°

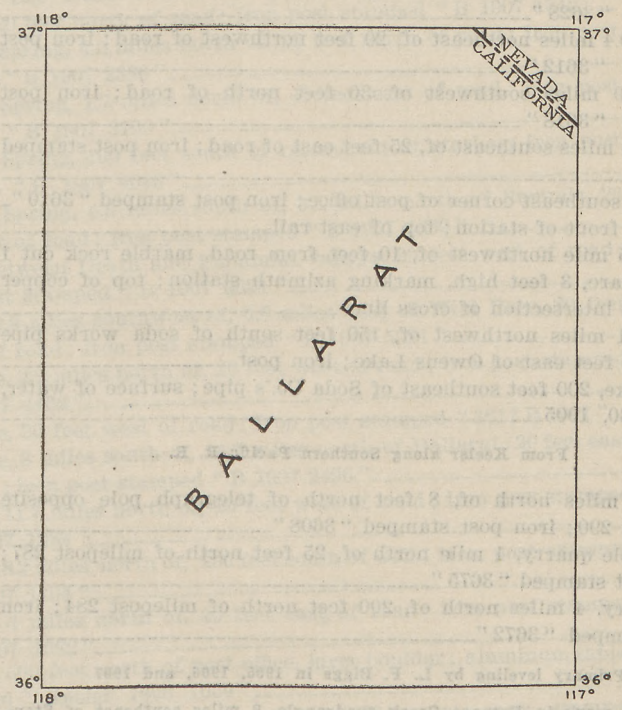


FIGURE 26.—Diagram of degree quadrangle 36°–37°, 117°–118°

BALLARAT QUADRANGLE

[Latitude 36°–37°; longitude 117°–118°]

INYO COUNTY

Precise leveling by R. A. Farmer in 1905

North along stage road to Keeler

	Feet
Little Lake, 8.1 miles north of, 40 feet east of road; iron post stamped "3370"	3,368.840
Little Lake, 10.9 miles north of, 25 feet west of road; iron post stamped "3444"	3,443.144
Haiwee Meadows, 3.4 miles south of, 80 feet east of road; iron post stamped "3642"	3,640.775
Haiwee Meadows, 720 feet north of house, 35 feet west of road; iron post stamped "3734"	3,733.043

	Feet
Haiwee Meadows, 3.1 miles north of, 100 feet west of road on hillside, at summit of granite boulder; aluminum tablet stamped "3737"	3,735.887
Olancha, 2.2 miles south of, 20 feet east of road; iron post stamped "3717"	3,715.771
Olancha, 3.2 miles northeast of, 20 feet southeast of road; iron post stamped "3619"	3,618.201
Olancha, 6.4 miles northeast of, 50 feet northwest of road; iron post stamped "3628"	3,627.523
Olancha, 9.4 miles northeast of, 20 feet northwest of road; iron post stamped "3612"	3,611.503
Keeler, 6.9 miles southwest of, 30 feet north of road; iron post stamped "3618"	3,617.163
Keeler, 3.4 miles southeast of, 25 feet east of road; iron post stamped "3631"	3,629.739
Keeler, at southeast corner of post office; iron post stamped "3610"	3,609.010
Keeler, in front of station; top of east rail	3,599.6
Keeler, 0.5 mile northwest of, 10 feet from road, marble rock cut 1 foot square, 3 feet high, marking azimuth station; top of copper plate, at intersection of cross lines	3,598.164
Keeler, 2.1 miles northwest of, 150 feet south of soda works pipe line, 400 feet east of Owens Lake; iron post	3,568.882
Owens Lake, 200 feet southeast of Soda Co.'s pipe; surface of water, March 30, 1905	3,567.3

From Keeler along Southern Pacific R. R.

Keeler, 3 miles north of, 8 feet north of telegraph pole opposite milepost 290; iron post stamped "3608"	3,606.777
Inyo marble quarry, 1 mile north of, 25 feet north of milepost 287; iron post stamped "3675"	3,673.291
Inyo quarry, 4 miles north of, 200 feet north of milepost 284; iron post stamped "3672"	3,670.526

Primary leveling by L. F. Biggs in 1905, 1906, and 1907

From bench mark in Furnace Creek quadrangle, 9 miles southeast of Stovepipe, northwest via Stovepipe to Mesquite Springs (1 yard error placed at State line)

Stovepipe, 6.3 miles southeast of, on summit 20 feet east of road; iron post stamped "B 1907 —68"	[1]—69.404
Stovepipe, 3.6 miles southeast of, 20 feet north of road; iron post stamped "B 1907 —90"	—92.047
Stovepipe, 150 feet east of store, at junction of roads; iron post stamped "B 1907 —49"	—50.424
Stovepipe, 3.3 miles northwest of, 30 feet east of road; iron post stamped "B 1907 —13"	—15.087
Stovepipe, 5.6 miles northwest of, 20 feet west of road, boulder; tablet stamped "B 1907 —29"	—31.239
Surveyors Well, 7.5 miles north of, 1.2 miles south of Lost Wagons, 50 feet east of road, large white boulder; aluminum tablet stamped "B 1907 +373"	371.016
Mesquite Spring, 400 feet south of, at junction of roads, boulder; tablet stamped "B 1907 1739"	1,736.841

[1] Elevations having the minus sign are below sea level.

From Stovepipe southwest to Emigrant Wash, thence south to Ballarat

	Feet
Stovepipe, 2.5 miles southwest of, 20 feet north of road; iron post stamped "B 1907—46"	[2]—47.361
Stovepipe, 6.3 miles southwest of, 20 feet north of road; iron post stamped "B 1907"	—1.814
Stovepipe, 9.6 miles southwest of, 20 feet north of road; iron post stamped "B 1907 637"	635.117
Stovepipe, 12.5 miles southwest of, 6.7 miles north of Emigrant Spring, 20 feet north of road; iron post stamped "B 1907 1542"	1,540.571
Emigrant Spring, 4.2 miles north of, 20 feet north of road; iron post stamped "B 1907 2380"	2,378.101
Emigrant Spring, 1.7 miles north of, 40 feet east of road; iron post stamped "B 1907 3199"	3,197.435
Emigrant Spring, 100 feet south of restaurant at station; iron post stamped "B 1907 4046"	4,044.015
Emigrant Spring, 4.3 miles south of, 3.1 miles north of Summit, 20 feet east of road; iron post stamped "B 1907 4899"	4,897.638
Summit between Death and Panamint valleys, 20 feet west of road; iron post stamped "B 1907 5321"	5,318.987
Summit, 2.9 miles southwest of, 5.6 miles east of Wild Rose, 20 feet north of road; iron post stamped "B 1907 5021"	5,019.253
Wild Rose, 2.2 miles north of, 20 feet west of road; iron post stamped "B 1907 4462"	4,460.838
Wild Rose, 20 feet west of road; iron post stamped "3617 B 1907"	3,615.929
Wild Rose, 3 miles south of, 14.7 miles north of Ballarat, 20 feet east of road; iron post stamped "B 1907 2496"	2,494.833
Ballarat, 11.7 miles north of, 20 feet west of road; iron post stamped "B 1907 1989"	1,987.111
Ballarat, 8.2 miles north of, 200 feet south of well; iron post stamped "B 1907 1104"	1,102.321
Ballarat, 4 miles north of, 20 feet east of road; iron post stamped "B 1907 1082"	1,080.144
Ballarat, 300 feet north of post office, large boulder; aluminum tablet stamped "Keeler 1906 1069"	1,068.787
Ballarat, at southwest corner of post office; iron post stamped "1066"	1,065.929

From Ballarat south 3.8 miles

Ballarat, 1.6 miles south of, 20 feet east of road, boulder; aluminum tablet stamped "B 1907 1054"	1,053.400
Ballarat, 3.8 miles south of, 20 feet east of road; iron post stamped "B 1907 1049"	1,048.393

From Keeler southeast along road to Darwin (leveled twice)

Keeler, 3.4 miles southeast of, 25 feet east of road; iron post stamped "B 3631"	3,629.739
Keeler, 6.4 miles southeast of, 80 feet northeast of road, dark volcanic boulder; aluminum tablet stamped "3925 B"	3,923.710
Keeler, 9.6 miles southeast of, 0.5 mile south of summit, 25 feet east of road, volcanic boulder; aluminum tablet stamped "4300 B"	4,298.312

[2] Elevations having the minus sign are below sea level.

	Feet
Keeler, 12.8 miles southeast of, 1,000 feet east of stone corral, 20 feet north of road; iron post stamped "4553 B"	4,551.849
Darwin, 8.4 miles northwest of, 25 feet north of road, black volcanic boulder; aluminum tablet stamped "4880 B"	4,879.298
Darwin, 5.3 miles northwest of, 25 feet south of road; iron post stamped "5291 B 1905"	5,289.925

From Darwin south and southwest via Coso Hot Springs to Little Lake (a point on Farmer's precise line)

Darwin, 2 feet from southeast corner of post office; iron post stamped "4746 B"	4,747.539
Darwin, 2.5 miles south of, 25 feet west of road, 15 feet west of pipe line, granite rock; aluminum tablet stamped "4787 B"	4,788.860
Darwin, 5.7 miles south of, 25 feet west of road, granite boulder; aluminum tablet stamped "5425 B"	5,426.428
Coso, 200 feet north of, 200 feet north of spring, 200 feet northwest of road, summit of cliff of boulders; aluminum tablet stamped "5829 B"	5,830.336
Coso, 2.8 miles southwest of, 1,700 feet north of Cole Spring, 25 feet south of road, granite boulder; aluminum tablet stamped "6413 B"	6,414.298
Coso, 6.6 miles southwest of, 20 feet west of road, on summit west of volcanic mountain, volcanic rock; aluminum tablet stamped "6251 B"	6,252.850
Coso Hot Springs, 3.3 miles northeast of, 40 feet west of road, at east side of large gulch, granite boulder; aluminum tablet stamped "4398 B"	4,391.057
Coso Hot Springs, 1,000 feet west of, granite rock; aluminum tablet stamped "3632 B"	3,633.850
Coso Hot Springs, 4.1 miles west of, 20 feet south of road, at top of steep pitch volcanic rock; aluminum tablet stamped "4059 B"	4,060.610
Coso Hot Springs, 8 miles west of, 60 feet southeast of road, opposite small crater, granite boulder; aluminum tablet stamped "3406 B"	3,407.661
Little Lake, 1.7 miles north of, 50 feet west of road, summit of boulder; aluminum tablet	3,328.541

From Darwin south along road to point 5 miles south of Millspaugh, thence south 6 miles to point 6.6 miles north of Mount Vernon

Darwin, southwest corner of post office; iron post stamped "4746 B"	4,747.539
Darwin, 3 miles southeast of, 15 feet west of road, granite boulder; aluminum tablet stamped "4463 B"	4,464.886
Darwin, 6.4 miles southeast of, 25 feet east of road at junction; iron post stamped "4446 B"	4,448.032
Darwin, 10.5 miles southeast of, 25 feet east of road, granite boulder; aluminum tablet stamped "4815 B"	4,817.255
Darwin, 12.3 miles southeast of, 20 feet west of road, granite boulder; bronze tablet stamped "5324 B"	5,326.153
Darwin, 15 miles southeast of, 60 feet west of Frank Steward's house; iron post stamped "5722 B"	5,724.529
Mount Vernon Mill, 12.4 miles north of, 5 miles west of Millspaugh, 25 feet east of road; iron post stamped "5685 B 1905"	5,687.370

Primary leveling by Ress Philips in 1905–6

From point 5 miles west of Millspaugh east along stage road via Millspaugh to Ballarat

	Feet
Millspaugh, 1 mile west of, 20 feet south of road, in large boulder; aluminum tablet stamped "6073 Keeler"	6,073.648
Millspaugh, 100 feet west of post office, 75 feet south of well, in large outcropping boulder; aluminum tablet stamped "6157 Keeler"	6,157.005
Millspaugh, 3 miles southeast of, 0.2 mile east of spring and stage station, 12 feet north of road, in top of granite boulder; bronze tablet stamped "4857 Keeler"	4,857.555
Millspaugh, 5.5 miles southeast of, in canyon 100 feet west of high black cliff, in large outcropping boulder; aluminum tablet stamped "3517 Keeler"	3,517.121
Ballarat, 8.7 miles northwest of, on broad slope overlooking Ballarat and Panamint valleys, below mouth of Shepherds Canyon, 20 feet north of road, in large granite boulder; aluminum tablet stamped "2460 Keeler 1905"	2,460.408
Ballarat, 4.6 miles west of, 15 feet north of road, in outcropping boulder; aluminum tablet stamped "1387 Keeler"	1,388.360
Ballarat, 2.4 miles west of, 40 feet west of junction of Ballarat and Bullfrog roads, in large borax flat; iron post stamped "Keeler 1045"	1,044.900
Ballarat, 300 feet north of post office, 20 feet north of road, in large outcropping boulder; aluminum tablet stamped "1069 Keeler"	1,068.787
Ballarat, 20 feet south of post office; iron post stamped "1066 Keeler" set in cubic yard of concrete	1,065.929

Precise leveling along the Los Angeles Aqueduct by the Aqueduct Commission in 1907, adjusted by the U. S. Geological Survey in 1922

Downer's A line station 605+00, 150 feet west of, near summit of ridge; brass plug in rock, "L. A. A. B. M. No. 22, 30 feet W" painted on large blue boulder facing line	3,786.255
Downer's A line station 515+00, 450 feet west of, near top of ridge; brass plug in rock, marked with red, white, and blue flag and painted "L. A. A. B. M. No. 23"	3,794.698
Downer's A line station 388+00, 250 feet west of, near top of ridge; brass plug in rock, marked with red, white, and blue flag and painted "L. A. A. B. M. No. 24"	3,781.571
Downer's A line station 264+00, 150 feet west of, 200 feet north of Olancha Creek, 1 mile west of Olancha; brass plug in boulder, marked with red, white, and blue flag and painted "L. A. A. B. M. No. 25"	3,770.916
Downer's A line station 130+00, 320 feet east of, 5 feet south of branched yucca tree, marked with red, white, and blue flag on yucca and painted "L. A. A. B. M. No. 26" on blaze. Standard L. A. A. pipe No. 26	3,759.344
Downer's A line station 1+00, 200 feet west of, 5 feet southeast of branched yucca tree on edge of mesa, marked with red, white, and blue flag on yucca and painted "L. A. A. B. M. No. 27" on blaze. Standard L. A. A. pipe No. 27	3,787.784
Haiwee Meadows, 750 feet north of house, 35 feet west of road; standard U. S. G. S. pipe, stamped "L. A. A. 28" and "3731.029" on south edge of cap. (Bull. 342, p. 10)	3,733.043

From Haiwee Reservoir to Red Rock summit

	Feet
Lower Haiwee dam site, 1,200 feet south of, standard L. A. A. pipe on knoll at end of low ridge, 100 feet west of road and 300 feet east of Young's grade station 3596+00, marked with red, white, and blue flag. No. 29	3,676.304
Young's grade station 3757+00, 275 feet west of, brass plug in boulder, three-fourths of a mile southwest of Rose Springs and about one-fourth of a mile west of Reaburn's station 94, painted "L. A. A. B. M. No. 30" on rock and marked with red, white, and blue flag. No. 30	3,712.901
Reaburn's station 72, 400 feet southwest of, brass plug in granite boulder, 600 feet north of station 71 and about three-fourths of a mile northeast of Portuguese Bench, painted "L. A. A. B. M. No. 31" on rock 6 feet west, and marked with red, white, and blue flag. No. 31	3,560.280
Reaburn's station 49, 400 feet northwest of, brass plug in granite boulder, on summit of knoll about 1 mile west of stage road where it crosses dry lake bed, painted on rock "L. A. A. B. M. No. 32," and marked with red, white, and blue flag. No. 32	3,559.592
Reaburn's station 25, 1,000 feet northwest of, brass plug in granite boulder, on top of ridge, 300 feet west of deep wash from Little Lake Canyon, painted on rock "L. A. A. B. M., No. 33," and marked with red, white, and blue flag	3,583.261
Reaburn's station 11, 50 feet east of, on crest of slate-colored ridge, 100 feet southeast of small yucca tree, between north and south portals of tunnel No. 2; standard L. A. A. pipe, marked with red, white, and blue flag, stamped "L. A. A. B. M. No. 33A"	3,502.710
Little Lake, on first ridge north of steep ridge south of, ending in lava cliff, standard L. A. A. pipe behind small rocky point; Young's grade station 4484+87.4 is below bench mark on same ridge. No. 34. Marked with red, white, and blue flag	3,537.497
Young's grade station 4507+00, in bottom of first deep canyon south of steep ridge ending in lava cliff, on ridge on north side of canyon; brass plug in granite boulder, painted "L. A. A. B. M. No. 35" on rock and marked with red, white, and blue flag	3,563.358
Soda Springs Canyon, on crest of sharp yellow ridge in center of upper end of first canyon north of; standard L. A. A. pipe No. 36, marked with red, white, and blue flag	3,583.918
Soda Springs Canyon, on crest of ridge jutting out from south side of upper end of; standard L. A. A. pipe No. 37, marked with red, white, and blue flag	3,571.073
Soda Springs Canyon, on saddle on short ridge jutting out from north side of first canyon south of, on rocky point; standard L. A. A. pipe No. 38, marked with red, white, and blue flag	3,573.824
Soda Springs Canyon, in third canyon south of, on ridge between forks of canyon; standard L. A. A. pipe No. 39, marked with red, white, and blue flag	3,551.668
Fivemile Canyon, 100 feet south from point 100 feet above crest of falls; brass plug in rock, painted "L. A. A. B. M. No. 40" in large letters facing north side of canyon, marked with red, white, and blue flag	3,481.756

	Feet
Dead Foot Canyon, near end of low ridge, directly south of pass to Fivemile Canyon, 50 feet south of small yucca tree; brass plug in flat granite boulder, painted on rock "L. A. A. B. M. No. 41," marked with red, white, and blue flag	3,451.380
Reaburn's station 1051, on rocky point, 150 feet north of mouth of Ninemile Canyon; brass plug in boulder, painted "L. A. A. B. M. No. 42" and marked with red, white, and blue flag	3,533.852
Reaburn's station 1046, on ridge 600 feet southeast of mouth of Ninemile Canyon; brass plug in boulder, painted on rock "L. A. A. B. M. No. 43," marked with red, white, and blue flag	3,532.644

DEGREE QUADRANGLE 36°–37°, 118°–119°

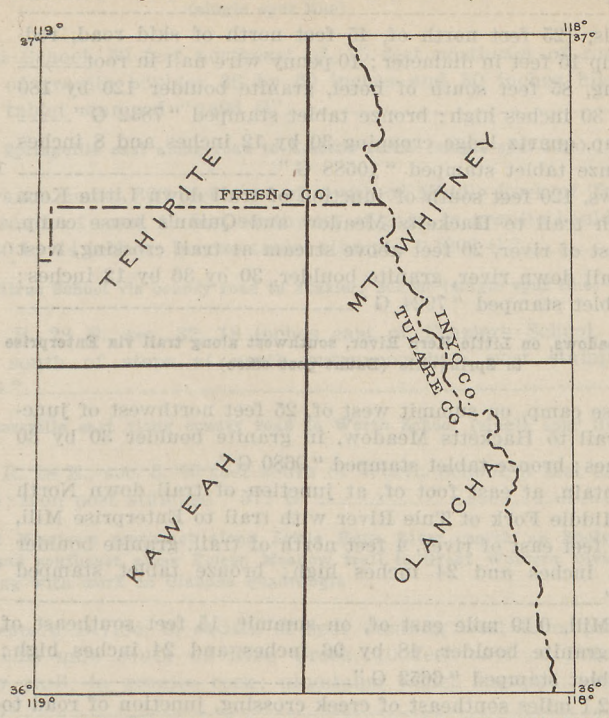


FIGURE 27.—Diagram of degree quadrangle 36°–37°, 118°–119°

KAWEAH QUADRANGLE

[Latitude 36°–36° 30′; longitude 118° 30′–119°]

TULARE COUNTY

Primary leveling in 1902 by W. V. Hardy and in 1904–5 by R. A. Farmer, M. D. Shannon, and C. H. Semper

From Lemoncove easterly along county road via Three Rivers to Mineral King, thence southeast along trail over Farewell Gap to Wet Meadows

	Feet
T. 18 S., R. 28 E., sec. 4, 60 feet northeast of Horse Creek bridge, south side of road, 3 feet southwest of oak tree at southwest end of gate on road up Horse Creek; iron post stamped "610 G"	610.390
T. 17 S., R. 28 E., sec. 24, 1.42 miles north of Three Rivers post office, junction of Mineral King and Giant Forest wagon roads, 100 feet east of south end of Kaweah River bridge, in boulder; bronze tablet stamped "816 G"	816.151
Three Rivers post office, 5 miles northeast of, 40 feet east of Mount Whitney Co.'s power house, north of road, in side of large granite boulder, 30 inches above level of road; bronze tablet stamped "1145 G"	1,145.805

	Feet
Oak Grove telephone station, 120 feet north of, south of road, 30 inches east of gate; iron post stamped "2704 G"	2,705.029
Tranger's camp, 100 feet west of stream, north of road, in granite bedrock, 24 inches above level of road; bronze tablet stamped "4595 G"	4,595.303
Atwells Mills, 125 feet north of, 45 feet north of skid road, redwood stump 15 feet in diameter; 10-penny wire nail in root	6,452.664
Mineral King, 85 feet south of hotel, granite boulder 120 by 180 inches by 30 inches high; bronze tablet stamped "7832 G"	7,832.136
Farewell Gap, quartz ledge cropping 30 by 12 inches and 8 inches high; bronze tablet stamped "10588 G"	10,589.005
Wet Meadows, 120 feet south of junction of trail down Little Kern River with trail to Hacketts Meadow and Quinn's horse camp, 40 feet east of river, 20 feet above stream at trail crossing, west side of trail down river, granite boulder, 30 by 36 by 12 inches; bronze tablet stamped "7924 G"	7,923.691

From Wet Meadows, on Little Kern River, southwest along trail via Enterprise to Springville (Daunt post office)

Quinn's horse camp, on summit west of, 25 feet northwest of junction of trail to Hacketts Meadow, in granite boulder 30 by 30 by 84 inches; bronze tablet stamped "9680 G"	9,679.725
Moses Mountain, at east foot of, at junction of trail down North Fork of Middle Fork of Tule River with trail to Enterprise Mill, about 300 feet east of river, 4 feet north of trail, granite boulder 36 by 48 inches and 24 inches high; bronze tablet stamped "6614 G"	6,613.299
Enterprise Mill, 0.19 mile east of, on summit, 15 feet southeast of road, in granite boulder, 48 by 96 inches and 24 inches high; bronze tablet stamped "6652 G"	6,651.483
Rancheria, 2.1 miles southeast of creek crossing, junction of road to Coburn dump, 4 feet west of road, 4 feet south of oak tree; iron post stamped "3202 G"	3,203.297
T. 20 S., R. 29 E., sec. 14, 2.7 miles south of Milo, 50 feet southwest of junction of road up North Tule River, in granite boulder 48 by 144 inches and 18 inches high; bronze tablet stamped "1391 G"	1,391.523
Springville, sec. 2, T. 21 S., R. 29 E., north side of school, midway between east and west entrance; iron post stamped "1032 G"	1,032.755

From Springville southwest along county road to Porterville

T. 21 S., R. 29 E., northwest corner of sec. 16, west side of Orange School, midway between north and south entrances; iron post stamped "745 G"	745.761
T. 21 S., R. 29 E., west side of sec. 24, 20 feet west of Citrus School, 30 inches south of gate; iron post stamped "622 G"	622.346

From Yokohl School east up Yokohl Valley and over gap to Milo

T. 19 S., R. 27 E., sec. 24, 70 feet southwest of Yokohl School, 20 feet north of road, in embedded granite boulder 36 by 72 inches and 12 inches high; bronze tablet stamped "636 G"	636.518
T. 19 S., R. 28 E., sec. 15, about 400 feet north of A. Carlson's ranch house, south of road, 30 inches east of gate; iron post stamped "991 G"	991.702

Feet

Blue Ridge, south end of, summit on road, 15 feet north of road, in granite ledge; bronze tablet stamped "2675 G"---------- 2,675.511

From Three Rivers post office south along county road to Cinnamon School (single spur line)

Cinnamon School, 50 feet northeast of, 15 feet northeast of road, in top of granite boulder 36 by 60 inches and 30 inches high; bronze tablet stamped "1496 G"---------- 1,496.507

From Springville east along road to Elster's ranch (single spur line)

Elster's ranch house, 300 feet west of, south of Middle Fork of Tule River, south of road, 10 feet southwest of gate, in granite boulder 30 by 30 by 14 inches; bronze tablet stamped "1206 G"---------- 1,206.734

From Citrus School via county road to Fraziers School (single spur line)

T. 20 S., R. 28 E., sec. 32, 18 inches east of Fraziers School, 18 inches south of steps at north entrance; iron post stamped "585 G"---------- 585.869

From Portersville east along county road to Worth School (single spur line)

T. 22 S., R. 28 E., sec. 3, 45 feet south of Worth School, 3 feet east of gate; iron post stamped "571 G"---------- 570.965

From Wet Meadows southeast along Little Kern River, north up Shotgun Creek, and southeast along Poison Meadow trail to Great Western Divide, connecting with work on Olancha quadrangle

Great Western Divide, in saddle of spur running west from point about 0.25 mile south of Rifle Creek, 10 feet east of Poison Meadow trail, in granite rock; aluminum tablet stamped "9046 G 1905"---------- 9,046.550

MOUNT WHITNEY QUADRANGLE

[Latitude 36° 30′–37° 00′; longitude 118°–118° 30′]

INYO, FRESNO, AND TULARE COUNTIES

Precise leveling by R. A. Farmer in 1905

North along Southern Pacific R. R. to Aberdeen

Feet

Mount Whitney station, 0.5 mile south of, 100 feet south of milepost 281; iron post stamped "3681"---------- 3,680.044
Mount Whitney station, in front of; top of east rail---------- 3,687.3
Mount Whitney station, 2.5 miles north of, 3 feet east of track, opposite milepost 278; iron post stamped "3690"---------- 3,688.217
Mount Whitney station, 5.5 miles north of, 10 feet south of milepost 275; iron post stamped "3718"---------- 3,716.131
Francis, in front of station; top of east rail---------- 3,722.5
Francis, 100 feet northeast of station, east of track; iron post stamped "3723"---------- 3,721.516
Francis, 3 miles north of station, at milepost 269; iron post stamped "3739"---------- 3,737.743
Citrus, in front of station; top of east rail---------- 3,763.4
Citrus, in front of station; iron post stamped "3766"---------- 3,764.515

	Feet
Citrus, 3 miles north of station, at milepost 264; iron post stamped "3764"	3,762.043
Citrus, 6 miles north of station; iron post stamped "3786"	3,783.717
Aberdeen, 5 miles south of, 20 feet north of milepost 258; iron post stamped "3815"	3,812.541
Aberdeen, 2 miles south of, at milepost 255; iron post stamped "3837"	3,829.533

Primary leveling by L. F. Biggs in 1905

From Mount Whitney station west along wagon road and trail to summit of Mount Whitney

Mount Whitney station, southeast corner of, spike in base of telegraph pole. (This from precise line from Keeler to Law)	3,688.274
Lone Pine, in front of post office; iron post stamped "3728 B 1905"	3,725.260
Stone house, 200 feet south of, southwest of creek, granite boulder 20 by 8 by 7 feet, 10 feet south of road; aluminum tablet stamped "4519 B 1905"	4,516.931
Lone Pine Creek canyon, mouth of, 400 feet east of falls, south of trail, in face of rock 20 by 10 by 6 feet; aluminum tablet stamped "6670 B 1905"	6,667.902
Hunters camp ground, 20 feet south of trail, at bottom of steep pitch to the lakes, rock 10 by 6 feet and 5 feet out of ground; aluminum tablet stamped "8373 B 1905"	8,370.741
Summit of divide of Sierra Nevada Mountains where Lone Pine trail crosses, 20 feet north and west of trail, in granite wall; aluminum tablet stamped "13337 B 1905"	13,334.986
Mount Whitney, on south slope of (b. m. No. 35 by Semper), junction of Lone Pine Creek and Crabtree Creek trails; rock on top, marked "13766"	13,766.68
Mount Whitney, highest point of summit, in large rock 6.5 feet south and 5 feet west of center of monument; aluminum tablet half an inch thick, 4.5 inches wide, and 7 inches long, engraved as follows: "U. S. Geological Survey, Charles D. Walcott, Director, Latitude 36° 44′ 44″, Longitude 118° 17′ 29″, Elevation above sea, 14,501, 1905"	14,500.737

Primary leveling by C. H. Semper in 1905

From Mount Whitney west along trail to Crabtree Meadow, thence northwest to Kern River, thence south down Kern River to Rock Creek

Crabtree Meadow, at junction of trail to Mount Whitney, Kern River, and Whitney Creek, top of very large rock; aluminum tablet stamped "10330 G 1905 7 S"	10,331.784
East Fork of Kern River, 2.4 miles north of, on cut-off trail, 30 feet northeast of crossing of small creek, south margin of trail, on north face of large boulder in small meadow; aluminum tablet stamped "9837 1905 6 S"	9,838.278

Primary leveling by L. F. Biggs in 1905

From Lone Pine south along road 8 miles

Lone Pine, in front of post office; iron post stamped "3727 B"	3,725.260
Lone Pine, 5 miles south of, 100 feet south of gulch, 20 feet west of road; iron post stamped "3711 B"	3,708.545

From Lone Pine north along road to Independence, thence east to Citrus

	Feet
Lone Pine, 4 miles north of, 60 feet east of road, in granite boulder; aluminum tablet stamped "B"	3,722.051
Lone Pine, 7 miles north of, 20 feet east of road; iron post stamped "B"	3,810.507
Independence, 5.5 miles south of, 80 feet north of Shepherd's house, 50 feet west of road, in boulder; aluminum tablet stamped "3873 B"	3,870.355
Independence, 2 miles south of, at top of hill, 100 feet west of road, in boulder; aluminum tablet stamped "B"	3,940.258
Citrus, in front of station; iron post stamped "F 10"	3,764.515

From Independence north along road to Aberdeen

Independence, in west wall of courthouse; aluminum tablet stamped "B"	3,923.098
Independence, 4.5 miles north of, 15 feet west of road, 400 feet south of house, granite boulder; aluminum tablet stamped "3891 B"	3,887.888
Independence, 7.5 miles north of, 20 feet west of road: iron post stamped "3868 B"	3,865.482
Independence, 10.5 miles north of, 60 feet west of road; 500 feet north of stream crossing, 0.5 mile west of Eaton's house, in volcanic rock; aluminum tablet stamped "3933 B"	3,930.044
Aberdeen, 2.8 miles southwest of, 2 miles north of Eaton's house, east side of road, volcanic rock; aluminum tablet stamped "3864 B"	3,860.760

Precise leveling along the Los Angeles Aqueduct by the Aqueduct Commission in 1907, adjusted by the Geological Survey in 1922

Young's, west of, city's intake on right bank of Owens River, on ridge 300 feet; standard L. A. A. pipe, No. 1, stamped with elevation and number, marked with red, white, and blue flag on pole	3,830.530
Black Rock Springs, above wagon road where it skirts north edge of; brass plug in lava rock, stamped with elevation and "L. A. A. No. 2," rock marked "L. A. A. B. M. No. 2" in white paint	3,825.285
Young's grade station 388+00, 500 feet west of northeast corner SW. ¼ sec. 26, T. 12 S., R. 34 E., MDM, 2 feet north of fence and 275 feet east of large cottonwood tree in abandoned apple orchard; standard L. A. A. pipe, No. 3, 115 feet, marked with red, white, and blue flag on pole	3,811.145
Young's grade station 492+436, 120 feet west of, 2 feet south of fence on third standard parallel south, MDM; standard L. A. A. pipe, No. 4, marked with red, white, and blue flag on pole	3,813.493
Young's grade station 606+06, 120 feet west of; standard L. A. A. pipe, No. 5, marked with red, white, and blue flag on pole	3,808.633
Young's grade station 731+00, 215 feet southwest of, 30 feet west of northwest corner of sod-fence corral, 675 feet north of Citrus road at crossroads and of southeast corner of sec. 16, T. 13 S., R. 35 E., MDM, 2 feet west of fence line between secs. 15 and 16; standard L. A. A. pipe, No. 6, marked with red, white, and blue flag	3,805.390

	Feet
Young's grade station 908+00, 120 feet west of, half a mile east of road crossing of south line of sec. 34, T. 13 S., R. 35 E., MDM, 2 feet south of fence line on said boundary; standard L. A. A. pipe, No. 7, marked with red, white, and blue flag on pole	3,802.172
Young's grade station 1069+70, 115 feet west of, 230 feet west of northeast corner of SE. ¼ SE. ¼ sec. 14, T. 14 S., R. 36 E., 2 feet north of fence line, half a mile north of Georges Creek School, standard L. A. A. pipe, No. 8, marked with red, white, and blue flag on pole	3,799.628
Young's grade station 1159+00, 1,000 feet west of, 20 feet east of road and 6.9 miles north of Lone Pine; standard U. S. G. S. pipe stamped "L. A. A. 9" and elevation on west side of cap, marked with red, white, and blue flag on pole 200 feet west of station	3,810.507
Killian's grade station 1253+00, at north end of Alabama Hills; standard L. A. A. pipe No. 10, marked with red, white, and blue flag on pole	3,805.638
Killian's grade station 1322+00, 300 feet east of, 50 feet east of road, 3.9 miles north of Lone Pine; tablet on top of boulder, standard U. S. G. S., No. 11, marked "L. A. A. B. M. No. 11 El. 3720.728" on rock in white paint (Bull. 342, p. 99)	3,722.051
Killian's grade station 1445+00, at mouth of canyon south of stamp mill on line; brass plug in flat rock 150 feet No. 12, marked with red, white, and blue flag, painted "L. A. A. B. M. 12"	3,804.560
Killian's grade station 1545+5, 120 feet north of, half a mile west of Lone Pine; brass plug in granite boulder, painted "L. A. A. B. M. 13" on rock, marked with red, white, and blue flag on pole	3,795.237
Killian's grade station 1683+00, 200 feet north of old stone house; brass plug in large granite boulder 125 feet west, marked with red, white, and blue flag and painted "L. A. A. B. M. No. 14"	3,754.012
Killian's grade station 1792+73, at top of hill, 1,000 feet south of Lubkin ranch; brass plug in flat granite boulder, marked with red, white, and blue flag and painted "L. A. A. B. M. No. 15"	3,791.900
Killian's grade station 1894+00, 50 feet west of road, 10 feet south of large granite boulder, opposite north end of Owens Lake; brass plug in small granite boulder 400 feet east of, marked with red, white, and blue flag and painted "L. A. A. B. M. No. 16"	3,791.765
Killian's grade station 2021+00, 1,300 feet south of Carroll Creek, 150 feet west of auto road; standard L. A. A. pipe, marked with red, white, and blue flag	3,784.971
Downer's A line station 1036+00, 250 feet west of auto road; brass plug in rock, 100 feet west, marked with red, white, and blue flag and painted "L. A. A. B. M. No. 18"	3,794.946
Downer's A line station 953+00, brass plug in rock 150 feet west of, marked with red, white, and blue flag and painted "L. A. A. B. M. No. 19"	3,784.891
Downer's A line station 855+00, at Cottonwood Creek crossing, 150 feet south of creek and 150 feet east of cabin on hill; brass plug in rock 300 feet west, painted "L. A. A. B. M. No. 20"	3,813.649
Downer's A line station 735+00, 150 feet west of, east of mouth of Ash Creek canyon, 500 feet south of group of large boulders; brass plug in rock, marked with red, white, and blue flag and painted "L. A. A. B. M. No. 21"	3,786.509

OLANCHA QUADRANGLE

[Latitude 36°–36° 30′; longitude 118°–118° 30′]

INYO AND TULARE COUNTIES

Primary leveling by L. F. Biggs and C. H. Semper in 1905

From Olancha north along road on west side of Owens Lake to point 8 miles south of Lone Pine

	Feet
Olancha, in front of post office; iron post stamped "F 31"	3,648.259
Olancha, 4 miles north of, at top of hill, 20 feet west of road, in granite boulder; aluminum tablet stamped "3644 B"	3,641.416
Cottonwood, 1 mile south of, 40 feet east of road, in granite boulder; aluminum tablet stamped "3678 B"	3,674.918
Lone Pine, 14 miles south of, 2 miles north of Cottonwood, top of hill, 40 feet west of road, in rock; aluminum tablet stamped "3750 B"	3,747.269
Lone Pine, 11 miles south of, 50 feet east of road, granite boulder; aluminum tablet stamped "3691 B"	3,688.153
Lone Pine, 8 miles south of, 50 feet west of road at top of hill, granite boulder; aluminum tablet stamped "3691 B"	3,688.304

From Rock Creek south along Kern River to Coyote Creek [1]

Rock Creek, 100 feet south of, at top of bank of creek, west margin of trail, large rock; aluminum tablet stamped "6966 G 1905 5S"	6,968.613
Big Arroyo, 125 feet south of, 10 feet west of trail, 15 feet west of 4-foot cedar tree, in large rock; aluminum tablet stamped "6662 G 1905 4 S"	6,663.970
Kern River, junction of trail down Coyote Creek with trail along Kern River, 60 feet south of Coyote Creek, west face of large granite rock; aluminum tablet stamped "6456 G 1905 3 S"	6,457.815

From Coyote Creek south along Kern River to Trout Meadow, thence west along Jordan trail to Lloyd, thence via Lower Peppermint Meadows and Sucker Flat to Dry Meadows

Kern Lake, surface of water, August, 1905	6,232.5
Coyote Creek, 5.3 miles south of, 100 feet north of foot of hill leading up to Trout Meadow, 600 feet south of stone wall fence across trail, in rock ledge; aluminum tablet stamped "5786 G 1905 1 S"	5,788.656
Trout Meadow, at junction of trails to Kern Flat and Dry Meadows, 275 feet north of McIntyre's cabin, 25 feet east of trail, in west face of large rock; aluminum tablet stamped "6119 G 1905 2 S"	6,120.854
Little Kern River, 2.8 miles south of, 750 feet south of summit of mountain, 20 feet west of trail leading down to Lloyds Meadow, in face of large rock; aluminum tablet stamped "6839 G 1905"	6,840.827
Lloyds Meadow, at Soda Spring, top of rock over Soda Water Flow; aluminum tablet stamped "5527 G 1905 4 S"	5,529.303
Lower Peppermint Meadow, southeast end of trail which enters small dry canyon and dense scrub oak, 15 feet west of trail, face of large rock; aluminum tablet stamped "5196 G 1905 5 S"	5,198.386
Dry Meadows, at south end of, 20 feet east of trail leading to Mat Flynn Canyon, 160 feet north of trail crossing Dry Meadow Creek, west face of very large granite rock; aluminum tablet stamped "4341 G 1905 6 S"	4,343.958

[1] Line crosses Kern River at south end of Upper Funston Meadow.

From Kern River west via Coyote and Rifles creeks to Great Western Divide

	Feet
Great Western Divide, at summit, trail leading south, top of large rock; aluminum tablet stamped "10033 G 1905 2 S"	10,033.649

TEHIPITE QUADRANGLE

[Latitude 36° 30′–37°; longitude 118° 30′–119°]

FRESNO AND TULARE COUNTIES

Primary leveling by L. D. Ryus in 1903 and R. A. Farmer in 1904–5

From Kaweah Bridge northeast via Marble Fork and Horse Corral to Cedar Grove

	Feet
T. 16 S., R. 28 E., sec. 26, 7 miles north of Kaweah Bridge, on point of hill on grade 2 miles north of Davis ranch, in top of 5 by 6 foot rock on east side of road; bronze tablet	1,279.07
Sequoia National Park, 2,100 feet south of Cedar Creek camp, west side of road at point of hill, in granite ledge; bronze tablet	3,789.80
Sequoia National Park, 130 feet east of Marble Fork Bridge, east of road and Marble Fork of Kaweah River on Giant Forest road, 50 feet north of small bridge over stream, in granite ledge; bronze tablet	5,161.00
Sequoia National Park, at upper crossing of Marble Fork of Kaweah River, 200 feet south of Marble Fork, 25 feet west of trail, in granite rock; bronze tablet	6,720.24
T. 14 S., R. 30 E., "J. O." Pass about 2 miles north of Clover Creek, 15 feet east of trail, 10 feet from signboard tree, in rock; bronze tablet	9,414.97
Horse Corral Meadow, sec. 32, T. 13 S., R. 30 E., at fork of King River and Millwood and Giant Forest trails, at foot of mound, in top of granite rock; bronze tablet	7,648.90

From Cedar Grove northwest via Tehipite, Crown Valley, and Sampler cow camp to Snow Corral Meadows

Cedar Grove Hotel, 0.25 mile east of, sec. 13, T. 13 S., R. 30 E., 250 feet north of trail, 600 feet north of bridge over South Fork of King River, in granite rock 6 feet high; bronze tablet	4,635.02
Happy Gap or Red Saddle, sec. 30, T. 12 S., R. 30 E., summit of ridge between Middle Fork and South Fork of King River, in ledge of rock 40 feet south of trail; bronze tablet	9,310.83
T. 12 S., R. 29 E., sec. 11, Tehipite Valley, 1.3 miles south of Tehipite Dome, 200 feet north of ford, west bank of Middle Fork of King River, in large rock; bronze tablet	4,085.70
Crown Valley or Collins Meadow, sec. 30, T. 11 S., R. 29 E., at junction of Tunemah and Tehipite trails, 100 feet east of Rodgers corral, at Crown Valley camp, in granite rock, 4.5 feet high, 10 feet square; bronze tablet stamped "7879 F"	7,882.69
Three Springs, 1.5 miles east of, sec. 16, T. 11 S., R. 28 E., south side of trail, 200 feet west of small meadow, at rocky point 2 miles west of creek, 700 feet east of summit of ridge, in granite ledge; bronze tablet	8,274.41
Cliff Camp, 1 mile northwest of, north line of sec. 12, T. 11 S., R. 27 E., in granite ledge on west bank of North Fork of King River, 50 feet north of sheep bridge; tablet	6,177.98

From Three Springs south to Rodgers Ridge

	Feet
T. 12 S., R. 27 E., sec. 1, 5.5 miles southwest of Three Springs, 150 feet south of forks of trail on Rodgers Ridge, about 3.5 miles south of crossing of Rancheria Creek, in rock; bronze tablet	6,844.28

From Horse Corral Meadow west along trail via Big Meadow and General Grant National Park to Millwood

Big Meadow, sec. 8, T. 14 S., R. 29 E., 125 feet south of road, between Ellis camp and Open Meadow, at foot of rock mound; bronze tablet	7,662.74
Log Corral Meadow, sec. 4, T. 14 S., R. 28 E., 300 feet west of forks of General Grant Park and Happy Gap trails, 50 feet south of Happy Gap and Millwood trail, north side of road, in granite rock; bronze tablet	7,229.19

DEGREE QUADRANGLE 36°-37°, 119°-120°

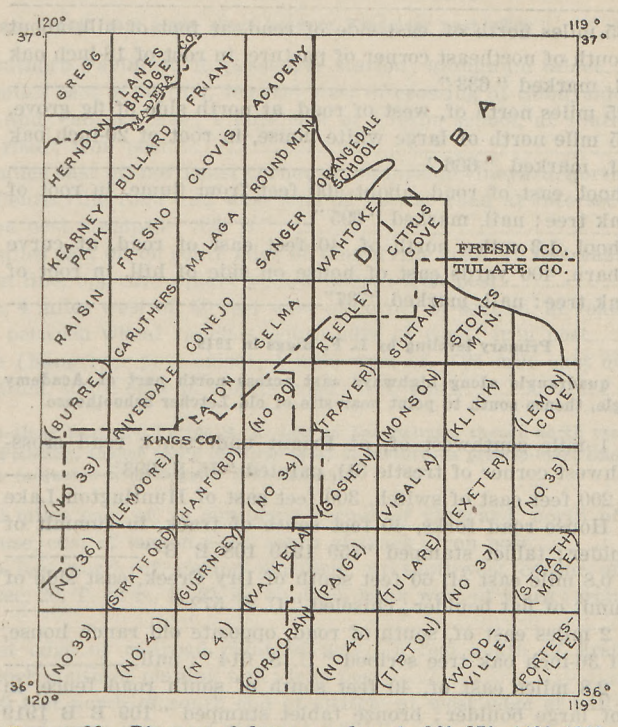


FIGURE 28.—Diagram of degree quadrangle 36°–37°, 119°–120°

ACADEMY QUADRANGLE

[Latitude 36° 52′ 30″–37°; longitude 119° 30′–119° 37′ 30″]

FRESNO COUNTY

Primary leveling by L. D. Ryus in 1901

From south border of quadrangle along highways northeast to point northeast of site of old Letcher School

	Feet
Academy, 0.25 mile south of, at northwest corner of bridge over small creek, in guardrail; nail marked "531"	527.83
Academy, 0.75 mile north of, opposite red house and airmotor mill, in foot of telephone pole; spike, marked "568"	565.37
Bridge over Dog Creek; marked "582"	579
Academy, 1.5 miles northeast of, east side of road, between two rock points of hill, north of bridge over Dog Creek 1200, in root of oak tree; nail, marked "616"	612.99

	Feet
Letcher, bridge over creek at; temporary bench mark, marked "619"	616
Letcher, 3,000 feet north of, 50 feet east of road, in pasture opposite small lake, in root of 30-inch oak tree; nail, marked "602"	599.70
Letcher, about 0.5 mile north of, in pasture, 50 feet east of county road, opposite lake west of road, in granite rock; tablet stamped "601"	597.757
Letcher, 1.35 miles north of, east side of road, at foot of hill, about 600 feet south of northeast corner of pasture, in root of 18-inch oak tree; nail, marked "633"	630.31
Letcher, 2.25 miles north of, west of road, at north side of fig grove, about 0.25 mile north of large white house, in root of 20-inch oak tree; nail, marked "666"	663.03
Letcher School, east of road, about 400 feet from flume, in root of 30-inch oak tree; nail, marked "695"	691.89
Letcher School, 1.3 miles north of, 40 feet east of road, at curve opposite barn, 400 yards east of house on side of hill, in root of 24-inch oak tree; nail, marked "737"	733.91

Primary leveling by L. F. Biggs in 1919

From Friant quadrangle along highways east across north part of Academy quadrangle, thence south to point near site of old Letcher schoolhouse

Sharpville, 1 mile southwest of, at Friant undertrack road crossing; southwest corner of trestle 8D, painted "U. S. 693"	692.86
Sharpville, 200 feet east of switch, 300 feet east of Huntington Lake and Toll House road forks, 40 feet south of track, in summit of large boulder; tablet stamped "759 1919 108 B B"	759.437
Sharpville, 0.8 mile east of, 60 feet south of Dry Creek, east side of road, summit of flat boulder; chiseled "U. S. 572"	572.40
Sharpville, 2 miles east of, south of road, opposite old ranch house, in root of 36-inch oak tree scribed "U. S. 614"; nail	614.46
Sharpville, 2.8 miles east of, 40 feet south of south road fence, in summit of large boulder; bronze tablet stamped "109 B B 1919 694"	694.325
Sharpville, 3.6 miles east of, 40 feet north of road, in root of 32-inch oak tree, scribed "U. S. 818"; spike	818.83
Sharpville, 5 miles east of, 100 feet northeast of Shaver and Toll House road forks, in base of 24-inch oak tree, scribed "U. S. 814"; spike	814.48
Letcher, 4.5 miles northeast of, 50 feet west of road, 300 feet south of road east, top of boulder; bronze tablet stamped "881 B B 1919 110"	881.154
Letcher, 3.5 miles northeast of, south of road, opposite T road north to Auberg; summit of boulder, painted "U. S. 750"	749.93
Letcher, 2.3 miles northeast of, 400 feet southeast of underflume crossing, 30 feet northeast of road, near site of old Letcher schoolhouse (removed), in base of 36-inch oak tree; nail	691.89

ACADEMY, CLOVIS, FRESNO, FRIANT, GREGG, MALAGA, AND SANGER 7½′ QUADRANGLES

[Latitude 36° 30′–37°; longitude 119° 30′–120°]

FRESNO COUNTY

Primary leveling by L. D. Ryus in 1901, 1902, and 1903 and by L. F. Biggs in 1908

From Fresno east along stage road to Kingriver post office

	Feet
Fresno, Southern Pacific R. R. passenger station; aluminum tablet	290.475
Fresno, 3 miles east of station, 400 feet west of crossing of Sunnyside car line and Ventura Ave., 1 mile east of Fresno school, at south edge of road; iron post	305.335
Fresno, 6 miles east of, northeast corner of Sunnyside vineyard, north side of Centerville road and west side of Fowler road at intersection; iron post stamped "323 B"	323.565
Fresno, 9 miles east of, on south edge of Centerville road, 40 feet east of section line, opposite square yellow house; iron post	348.185
Centerville, 4 miles west of, 50 feet west of corner of section, at road crossing between wheat ranches, south edge of road; iron post	373.495
Centerville (Kingriver post office), 1 mile west of, 0.25 mile east of Fowler ditch, south edge of county road; iron post	394.150

From Fresno along Southern Pacific R. R. east to Las Palmas, thence north via Clovis to Pollasky, thence along highway west to closure on precise-level line at Madera (adjusted with Biggs's 1908 running)

Barton, 1.2 miles east of, in southeast corner of vineyard, north of schoolhouse, east of wagon road, south of track; iron post	317.106
Tarpy, 150 feet north of station platform, at southwest corner of NW. ¼ sec. 20, T. 13 S., R. 21 E., on ditch bank west of track; iron post	347.664
Clovis, west edge of railroad right of way, 75 feet south of first switch block south of planing mill; iron post	356.567
Gordon, 150 feet north of south end of switch, at west edge of railroad right of way; iron post stamped "391"	391.611
Pollasky, 450 feet south of station, opposite milepost 231, at east edge of railroad right of way; iron post stamped "337"	339.985
Pollasky, 6.25 miles west of, 75 feet north of corner of small pasture at rocky point, south side of road; iron post stamped "451"	452.005
Cottonwood schoolhouse, 0.5 mile north of, north side of road, against fence of adobe ranch; iron post stamped "342"	342.928
Madera, 4 miles east of, 200 feet east of first small hill south of Sugar Pine and Madera road, 20 feet south of lumber flume, at north side of public road; iron post stamped "304"	305.011

From Clovis northeast along road to point near Letcher

Clovis, 3 miles northeast of, 50 feet north of flume section house 7, east side of road; iron post	409.600
Collins ranch, 1.1 miles east of, southwest of section house 6, south side of road, opposite curve in flume; iron post	461.379
Letcher, 0.5 mile north of, in granite rock in pasture, 50 feet east of county road; aluminum tablet stamped "601 F"	597.741

BULLARD QUADRANGLE

[Latitude 36° 45′–36° 52′ 30″; longitude 119° 45′–119° 52′ 30″]

FRESNO AND MADERA COUNTIES

Primary leveling by L. F. Biggs in 1919

From northeast corner of quadrangle along highways west and southwest to Midway grocery, thence west and south to milepost 199 on Southern Pacific R. R.

	Feet
Setch, 1.5 miles west of, south of road, at T road south, in power pole 114 painted "U. S. 371"; spike	371.52
Setch, 2 miles west of, south of road, at road south, in power pole 122 painted "U. S. 363"; spike	363.22
Lanes Bridge, 2.5 miles south of, 3 miles west of Setch, 250 feet north of T road east, west edge of road, at fence corner, in concrete post; bronze tablet stamped "359 1919 B B 18"	359.984
Lanes Bridge, 2 miles south of, west of road, at Y road northeast, in 42-inch gum tree scribed "U. S. 345"; spike	345.60
Lanes Bridge, 1.1 miles south of, west of road, in corner fence post; spike, painted "U. S. 352"	352.38
Lanes Bridge, 1.6 miles south of, east end of concrete canal culvert; chiseled square, marked "U. S. 352"	352.34
Lanes Bridge, 2.1 miles south of, 50 feet southeast of crossroads, at Midway grocery, south end of concrete culvert; chiseled square, marked "U. S. 344"	345.00
Midway grocery, 0.7 mile west of, in base of power pole 185, painted "U. S. 342"; spike	342.30
Bullard, 1 mile north by 2 miles east of, 1,500 feet east of electric railroad crossing, northeast corner of crossroads, 6 feet east of power pole 206, in concrete post; bronze tablet stamped "335 19 B B 1919"	335.780
Bullard, 1 mile north by 1.5 miles east of, at crossroads, 1 mile south of E. J. Bullard's residence, in corner fence post painted "U. S. 327"; spike	326.85
Bullard, 1 mile north by 1 mile east of, south end of concrete canal culvert; chiseled square, marked "U. S. 328"	328.03
Bullard, 1 mile north of, east end of concrete inverted canal siphon; bronze tablet stamped "322 B B 1919 20"	322.244
Bullard, west end of switch, at base of ladder at Atchison, Topeka & Santa Fe Ry. semaphore 9952, top of concrete; chiseled "U. S. 314"	313.74
Bullard, 0.9 mile south of, in floor of canal bridge, scribed "U. S. 303"; spike	303.28
Milepost 199 of Southern Pacific R. R., opposite fifth telephone pole north of, at west edge of right of way; iron post stamped "297 B" (Bull. 342, p. 17)	297.235

GREGG AND HERNDON QUADRANGLES

[Latitude 36° 45′–37°; longitude 119° 52′ 30″–120°]

FRESNO AND MADERA COUNTIES

Precise leveling by C. H. Semper in 1902

From milepost 190 southeast along Southern Pacific R. R. to milepost 199

	Feet
Milepost 190, 8 feet south of, west side of track, at margin of highway; iron post stamped "273 B"	274.457
Milepost 193, 6 feet south of, west side of track, at margin of highway; iron post stamped "284 B"	285.062
Milepost 196, 300 feet south of, 55 feet east of track, at crossing; iron post stamped "300 B"	300.649
Milepost 199, 10 feet south of, west side of track, at margin of highway; iron post stamped "297 B"	297.235

BURREL QUADRANGLE

[Latitude 36° 22′ 30″–36° 30′; longitude 119° 52′ 30″–120°]

FRESNO AND KINGS COUNTIES

Primary leveling by L. F. Biggs in 1919

From Wheatville quadrangle east along highways near north border of Burrel quadrangle into Riverdale quadrangle

	Feet
Burrel, 1.1 miles west of Y road southwest, southwest corner of concrete bridge over Fresno Slough; bronze tablet stamped "78 1919 B B 203"	203.304
Burrel, 300 feet northwest of depot, in crossing signboard, scribed "U. S. 200;" spike	200.09
Burrel, 1,000 feet east of, south end of concrete culvert; chiseled square, marked "U. S. 205"	205.45
Burrel, 1.1 miles east of; south end of concrete culvert, chiseled "U. S. 206"	207.10
Burrel, 1.7 miles east of, southeast corner of sec. 36, T. 16 S., R. 18 E., at T road north; iron post stamped "U. S. E. D. 316 215.0"; (U. S. E. D. elevation=215.04)	211.665
Burrel, 2.7 miles east of, opposite second-class T road north, in telephone pole painted "U. S. 209"; spike	210.06
Burrel, 3.8 miles east of, north of road at T fence north, in corner fence post painted "U. S. 212"; spike	213.00
T. 16 S., R. 19 E., 20 feet east of southwest corner of sec. 34, north of road, at T fence north, in concrete post; bronze tablet stamped "214 1919 B B 72"	215.03
T. 17 S., R. 19 E., 50 feet east of northwest corner of sec. 2, at T road south, in power pole painted "U. S. 223"; spike	223.42

Primary leveling by H. S. Senseney in 1923

Along west border of quadrangle into Wheatville quadrangle

T. 18 S., R. 18 E., at corner of secs. 1, 2, 11, and 12, east side of road, in fence post; railroad spike, marked "U. S. B. M. 217.6"	218.55

	Feet
Tps. 17 and 18 S., R. 18 E., at southeast corner of T-road east at corner of secs. 1, 2, 35, and 36, in fence post; railroad spike, marked "U. S. B. M. 212.8"	213.68
T. 17 S., R. 18 E., 10 feet north by 15 feet east of T-road west, at corner of secs. 25, 26, 35 and 36; iron post stamped "25S 1923"	206.265
Reference mark, 40 feet north by 10 feet east of post, in top of corner fence post; copper nail and washer	208.22
T. 17 S., R. 18 E., at southwest corner of T-road south, at corner of secs. 23, 24, 25, and 26, in fence post; railroad spike, marked "U. S. B. M. 209.3"	201.24
T. 17 S., R. 18 E., on south side of road, at corner of secs. 22, 23, 26, and 27, in fence post; railroad spike, marked "U. S. B. M. 202.1"	202.98

Primary leveling by R. B. Steele in 1923

From southeast corner to northwest corner of quadrangle (leveled twice)

Reference mark, 660 feet east of P. B. M., in root on south side of willow tree; copper nail	217.38
T. 18 S., R. 19 E., in southeast corner of sec. 2, in northwest angle of T-road north; iron post stamped "Prim. Trav. Sta. No. 1 R. S. 1923," painted "U. S. 219.1 P. B. M."	219.654
Center of culvert, 260 feet west of T-road north; painted "215.7"	216
T. 18 S., R. 19 E., in northwest corner of sec. 11, in southeast angle of crossroads, in northeast corner of wooden culvert; copper nail, painted "U. S. 214.3 B. M."	214.88
Angle in road; nail in corner of fence post, painted "212.2"	213
T. 18 S., R. 19 E., near quarter corner between secs. 3 and 4, at intersection of road north with levee along Fresno Slough, on top of levee at west end of gap in wire fence across levee; iron post stamped "R. S. 1923," painted "U. S. 221.3 P. B. M."	221.829
Reference mark, 300 feet northwest of P. B. M., in base of willow tree; copper nail	223.13
Riverdale, 3.25 miles west by 2.8 miles south of, at intersection of power line and levee road along Fresno Slough, in base of power pole at road fork; railroad spike, painted "U. S. 215.9 B. M."	216.40
Riverdale, 3.75 miles west by 2.6 miles south of, 0.5 mile south of T-road east, on west edge of road along levee, in base of willow tree; railroad spike, painted "U. S. 215.2 B. M."	215.78
Riverdale, 3.75 miles west by 2 miles south of, at intersection of T-road east and Fresno Slough, on west edge of levee, in base of 14-inch willow tree; copper nail and washer, painted "U. S. 216.1 B. M."	216.62
Riverdale, 4 miles west by 1.5 miles south of, 2 miles southeast along levee from bridge over Fresno Slough, on west edge of levee, in base of willow tree; copper nail, painted "U. S. 213.9 B. M."	214.49
Riverdale, 5 miles west by 1 mile south of, 1 mile southeast of bridge over Fresno Slough, at angle in levee; iron post stamped "R. S. 1923," not painted	215.156
Riverdale, 6 miles west of, at northeast corner of bridge over Fresno Slough, in top of piling; copper nail and washer, painted "U. S. 211.1 B. M."	211.65

	Feet
Riverdale, 6.5 miles west by 1 mile north of, 1 mile along levee road northwest from bridge over Fresno Slough, 50 feet southwest of wire gap crossing levee, in stump on levee; copper nail and washer, gatepost 50 feet north painted "U. S. 202.6 B. M."	203.23
Reference mark, 220 feet northwest of P. B. M., in base of willow tree; copper nail	210.31
Riverdale, 7 miles west by 1 mile north of, T. 17 S., R. 18 E., near quarter corner on south side of sec. 14, on east edge of levee road, at T-road east, at gap in wire fence across levee; iron post stamped "R. S. 1923," painted "U. S. 209.1 P. B. M."	209.743
T. 17 S., R. 18 E., near corner of secs. 10, 11, 14, and 15, on levee road at T road east, in base of west post at gap in wire fence across levee; railroad spike, painted "U. S. 206.9 B. M."	207.52

CARUTHERS QUADRANGLE

[Latitude 36° 30′–36° 37′ 30″; longitude 119° 45′–119° 52′ 30″]

FRESNO COUNTY

Primary leveling by L. F. Biggs in 1919

From Raisin quadrangle east along highways in north part of Caruthers quadrangle into Conejo quadrangle

	Feet
T. 15 N., R. 19 E., southwest corner of sec. 23, 40 feet northwest of crossroads, in base of telephone pole 514 painted "U. S. 242"; spike	242.94
T. 15 S., R. 19 E., northeast corner of sec. 25, 40 feet southwest of crossroads, in corner fence post painted "U. S. 245"; spike	245.54
T. 15 S., R. 19 E., southwest corner of sec. 20, 50 feet northeast of crossroads; iron post stamped "75 1919 B B 256"	256.574
T. 15 S., R. 20 E., southwest corner of sec. 21, 40 feet northeast of crossroads, in power pole painted "U. S. 252"; spike	252.54
T. 15 S., R. 20 E., southwest corner of sec. 22, 40 feet northeast of crossroads, in telephone pole painted "U. S. 258"; spike	258.44
T. 15 S., R. 20 E., northwest corner of sec. 26, 40 feet southeast of crossroads, in concrete post; bronze tablet stamped "76 265 1919 B B"	265.624
Highway bench mark, in power pole; spike, marked "265.84" (probably from Fresno)	265.84
T. 15 S., R. 20 E., southwest corner of sec. 24, 40 feet northeast of crossroads, in power pole painted "U. S. 268"; spike	268.69

CITRUS COVE QUADRANGLE

[Latitude 36° 37′ 30″–36° 45′; longitude 119° 15′–119° 22′ 30″]

FRESNO COUNTY

Primary leveling by L. F. Biggs in 1919

Along highways near south border of quadrangle (a jog from line on Sultana quadrangle)

	Feet
Orange Cove, 1.6 miles west of, 50 feet northwest of T road east, on fence line, in concrete post; bronze tablet stamped "1919 B B 105 404"	404.491

CLOVIS QUADRANGLE

[Latitude 36° 45′–36° 52′ 30″; longitude 119° 37′ 30″–119° 45′]

FRESNO COUNTY

Primary leveling by L. D. Ryus in 1901 and L. F. Biggs in 1919

From Malaga quadrangle north along Southern Pacific R. R. to Clovis (leveled twice)

	Feet
Las Palmas, 20 feet north of depot, in foot of telephone pole; railroad spike, marked "330"	327.22
Las Palmas, 1,800 feet north of, in wagon bridge over irrigation ditch	331.2
Tarpy, 1.8 miles south of, on west end of concrete culvert; chiseled square, marked "330"	330.74
Las Palmas, 1 mile northeast of, at foot of 215 milepost, in stake; nail, marked "335"	332.36
Tarpy; top of rail in 1901	337.1
Tarpy, 150 feet north of platform, at southwest corner N. W. ¼ N. W. ¼ sec. 20, T. 13 S., R. 21 E., on ditch bank, west of track; iron post stamped "350"	347.664
Tarpy, 1 mile north of, 3,000 feet north of ditch, in foot of telephone pole opposite whistling post; railroad spike, marked "358"	355.55
Melvin, 50 feet northeast of crossroads, on east end of concrete culvert; chiseled square	358.81
Clovis, 150 feet north of culvert, 300 feet south of sawmill, in foot of telephone pole; railroad spike	356.08
Clovis, at west edge of railroad right of way, 75 feet south of first switch block south of planing mill; iron post	356.567

Primary leveling by L. D. Ryus in 1901

From Clovis northeast along highways to Collins, Round Mountain quadrangle

Clovis, 1 mile northeast of, at road crossing opposite white house, in bent of flume trestle; railroad spike, marked "376"	373.62
Clovis, 2 miles northeast of, about 1 mile northeast of white house, opposite telephone pole, south of fence corner, in sill of flume; nail	385.00
Clovis, 3 miles northeast of, east side of road, 130 feet south of section house 7, in foot of telephone pole; railroad spike, marked "406"	403.62
Clovis, 3 miles northeast of, east side of wagon road, 50 feet north of, section house 7, iron post stamped (?)	409.600
Section house 7, 1.12 miles northeast of, in sill of flume bent; nail marked "426"	423.33

Primary leveling by L. F. Biggs in 1919

From Clovis along highways west and north to point near Gordon

Clovis, west part of town on east end of concrete culvert; chiseled square, marked "U. S. 359"	359.72
Clovis, 1 mile west of, in base of power pole marked "U. S 350"; spike	350.60
Clovis, 1.5 miles west of, 50 feet southeast of crossroads, on east end of concrete culvert; chiseled square, marked "U. S. 347"	347.13

	Feet
Clovis, 2 miles west of, opposite T road north, in top of head gate, painted "U. S. 343"; spike	342.89
Clovis, 2 miles west by 1 mile north of, 50 feet northeast of T road north, 10 feet west of power pole 237, in concrete post; bronze tablet (?) stamped "88 1919 B B 349"	349.623
Setch, 0.5 mile west by 1 mile south of, 50 feet southeast of crossroads; top of 2 by 2 inch redwood stake, scribed "U. S. 356"	356.37
Setch, 0.5 mile west of, north end of concrete culvert; chiseled square, marked "U. S. 371"	371.838

Primary leveling by L. F. Biggs in 1919

From Round Mountain quadrangle along highways west and north across northeast part of Clovis quadrangle into Friant quadrangle

Collins ranch, 1 mile west of, in base of power pole 59, painted "U. S. 420"; spike	419.88
Collins ranch, 2 miles west of, at angle in power line north, in power pole 42, painted "U. S. 410"; spike	409.89

CONEJO QUADRANGLE

[Latitude 36° 30′–36° 37′ 30″; longitude 119° 37′ 30″–119° 45′]

FRESNO COUNTY

Precise leveling by C. H. Semper in 1901

From Malaga quadrangle southeast along Southern Pacific R. R. across northeast part of Conejo quadrangle into Selma quadrangle

	Feet
Fowler, 1.7 miles south of, 12 feet south of milepost 217, west side of track, at margin of highway; iron post stamped "304 B"	304.367

Primary leveling by L. F. Biggs in 1919

From Caruthers quadrangle east along highways to point 1.7 miles southeast of Fowler

T. 15 S., R. 20 E., southeast corner of sec. 24, on north end of concrete culvert; chiseled square, marked "U. S. 277"	277.56
Bowles, 300 feet north of station, on east end of concrete railroad culvert A A 989; chiseled square, marked "U. S. 277"	278.13
T. 15 S., R. 21 E., southwest corner of sec. 20, 40 feet northeast of crossroads, in telephone pole painted "U. S. 280"; spike	281.20
T. 15 S., R. 21 E., southeast corner of sec. 20, 40 feet northwest of crossroads, in concrete post; bronze tablet stamped "284 77 1919 B B"	285.323
T. 15 S., R. 21 E., southeast corner of sec. 21, 40 feet northwest of crossroads, in telephone pole painted "U. S. 293"; spike	293.34
T. 15 S., R. 21 E., southwest corner of sec. 23, 50 feet northeast of crossroads, in telephone pole painted "U. S. 302"; spike	302.53
T. 15 S., R. 21 E., southeast corner of sec. 23, 40 feet northwest of crossroads, in telephone pole painted "U. S. 296"; spike	296.97
Fowler, 1.7 miles south of, 12 feet south of milepost 217, west of track, at margin of highway; iron post stamped "304" (Bull. 342, p. 18, +0.496)	304.367

DINUBA QUADRANGLE

[Latitude 36° 30′–37° ; longitude 119°–119° 30′]

FRESNO AND TULARE COUNTIES

Primary leveling by R. A. Farmer in 1904–5 and by L. D. Ryus in 1901

From Rodgers Ridge southwest to Dunlap

	Feet
Three Springs, 11.75 miles southwest of, between South and North forks of Kings River, at point where Rodgers trail from river reaches summit, 10 feet west of trail, in rock; bronze tablet	4,672.98
Kings River, crossing on Rodgers trail at Flume station No. 3, 130 feet north of river, 100 feet north of trail, in rock; bronze tablet stamped "1030"	1,034.03
Dunlap, 7 miles north of, 4.33 miles south of Kings River, 2 miles north of Akers (jr.) house, in saddle of ridge, 50 feet west of trail, in granite ledge; bronze tablet	3,566.23
Dunlap, 5 miles north of, summit of divide between Dunlap and White Deer Flat, southwest corner of pasture, 50 feet east of road, inside of fence; bronze tablet	2,399.94
Dunlap, 25 feet east of gate to Mountain Home Hotel, flush with ground, against fence, in rock; bronze tablet	1,915.38

From Millwood west to Dunlap

Millwood, opposite junction of flumes at north side of Sanger Lumber Co.'s shipping yard, in granite ledge in hill; bronze tablet	5,111.93
Dunlap, 2 miles east of, north side of road, at point of hill, in granite ledge 4 feet high; bronze tablet	2,388.98

From Centerville (old Kingsriver post office) east to Dunlap

Centerville, 3 miles east of, at intersection of Millwood and Sanger and Reedly roads, at southwest corner of vineyard; iron post	396.180
Centerville, 7 miles east of, in front of Clarks Valley church, south side of road, in top of granite ledge; aluminum tablet	471.14
Centerville, 10 miles east of, 3 miles east of Clarks Valley church, 1.75 miles west of Street's eating house, 0.25 mile east of small ridge crossing road, granite rock, 4 by 8 by 114 feet, on road right of way; aluminum tablet stamped "587 F" (?)	587.66
Squaw Valley post office, 100 feet southeast of, in rock; aluminum tablet stamped "1692 F"	1,693.95
Dunlap, 5.4 miles west of, 5.33 miles east of Squaw Valley store, 2 miles west of Mr. Irvin's house, west side of tributary of Mill Creek, 5 feet north of road, in top of granite ledge; aluminum tablet stamped "1501 F"	1,502.70

From point near Letcher northeast to Humphreys station

Humphreys, 700 yards north of station, 6 feet west of road, 100 feet west of creek, at small flat, in granite ledge; aluminum tablet stamped "1048 F"	1,044.924

EXETER QUADRANGLE

[Latitude 36° 15′–36° 22′ 30″; longitude 119° 07′ 30″–119° 15′]

TULARE COUNTY

Primary leveling by H. S. Senseney in 1923

Along south border of quadrangle

	Feet
T. 19 S., R. 25 E., 110 feet west of T road south, at corner of secs. 22, 23, 26, and 27, on south side of road, in concrete culvert; chiseled square, marked "U. S. B. M. 334.0"	334.55
T. 19 S., R. 25 E., 65 feet north of corner of secs. 23, 24, 25, and 26, east side of road, in telephone pole; railroad spike, marked "U. S. B. M. 335.0"	335.47
T. 19 S., Rs. 25 and 26 E., at corner of secs. 19, 24, 25, and 30, 25 feet north by 50 feet west of crossroads; iron post stamped "28 S 1923"	341.548
T. 19 S., R. 26 E., at corner of secs. 19, 20, 29, and 30, on north side of road, in corner post of fence running north; railroad spike, marked "U. S. B. M. 338.1"	338.53
T. 19 S., R. 26 E., at northwest corner of T road north, at corner of secs. 20, 21, 28, and 29, in fence post; railroad spike, marked "U. S. B. M. 339.6"	340.03
T. 19 S., R. 26 E., at corner of secs. 21, 22, 27, and 28, at southeast corner of crossroads, in telephone pole; railroad spike, marked "U. S. B. M. 346.5"	346.98

Primary leveling by F. R. Swearingen in 1923

From center of west edge of quadrangle north along west border into Klink quadrangle

T. 18 S., R. 25 E., at corner of secs. 21, 22, 27, and 28, 30 feet south by 15 feet east of intersection of T road south, in telephone pole; railroad spike, marked "U. S. 344.2 B. M."	344.58
T. 18 S., R. 25 E., near quarter corner of secs. 22 and 27, 35 feet north by 10 feet east of junction with T road north, in telephone pole; railroad spike, marked "U. S. 346.9 B. M."	347.28
St. Johns River, center of bridge over	352.9
T. 18 S., R. 25 E., near quarter corner of secs. 15 and 22, on west side of road, in telephone pole; railroad spike, marked "U. S. 348.3 B. M."	348.71
T. 18 S., R. 25 E., near quarter corner of secs. 10 and 15, 228 feet north by 12 feet west of intersection of crossroads, in base of 42-inch cottonwood tree; copper nail and washer, marked "U. S. 348.0 B. M."	348.36

Near center of east border of quadrangle

T. 18 S., R. 25 E., at quarter corner of secs. 27 and 34, 0.25 mile east of East Lynne School, in southeast angle of T road south; iron post stamped "3 M 1923," telephone pole, marked "U. S. 345.6 B. M."	346.079
Reference mark, 10 feet west by 20 feet north of P. B. M.; iron plug in center of highway	346.26

QUADRANGLE COMPRISING CARUTHERS, FRESNO, KEARNEY PARK, AND RAISIN QUADRANGLES

[Latitude 36° 30′–36° 45′; longitude 119° 45′–120°]

FRESNO COUNTY

Primary leveling by Corps of Engineers, U. S. Army, in San Joaquin Valley in 1913–14

	Feet
T. 15 S., R. 18 E., 100 feet north of southeast corner of sec. 34, on fence line; iron post (U. S. C. E. b. m. No. 322)	207.077
T. 16 S., R. 19 E., 35 feet southeast of northwest corner of sec. 2, 50 feet east of San Joaquin Light & Power Co.'s pole line, southeast corner of Cornelia Ave. and unnamed road, in fence corner; iron post (U. S. C. E. b. m. No. 323)	241.575
T. 15 S., R. 20 E., 40 feet northwest of southeast corner of sec. 36, northwest corner of Winery Ave. and Chestnut Ave., in fence corner; iron post (U. S. C. E. b. m. No. 324)	275.743
T. 14 S., R. 20 E., 50 feet northeast of southwest corner of sec. 31, in fence corner, northwest corner of Washington Ave. and Cross Ave.; iron post set in cement (U. S. C. E. b. m. No. 325)	256.911
McMullin, 0.5 mile north of, 200 feet north of second telegraph pole north of Coalinga road crossing, west side of Southern Pacific Co.'s Kerman to Hardwick branch, beside fence line; iron post (U. S. C. E. b. m. No. 326)	225.190
Station sign "Floyd," 25 feet northwest of, in fence angle on Southern Pacific Co.'s station reservation, south side of White's bridge road, 110 feet west of Southern Pacific Co.'s Tracy-Fresno line; iron post (U. S. C. E. b. m. No. 335)	241.735
T. 14 S., R. 19 E., near southwest corner of sec. 2, southeast corner of White's bridge road and Cornelia Ave., 5 feet east of San Joaquin Light & Power Co.'s power pole; iron post (U. S. C. E. b. m. No. 336)	266.857
Herndon, 0.7 mile northwest of, at intersection of east and west fence with Southern Pacific Co.'s fence, 48 feet southwest of southwest rail, 500 feet southeast of southeast end of Southern Pacific Co.'s bridge over San Joaquin River; red metal disk (U. S. C. E. b. m. No. 337)	285.901
T. 13 S., R. 19 E., 4,100 feet north and 2,000 feet east of southwest corner of sec. 6, 1 mile southwest of Herndon Bridge, 700 feet west of E. H. Bowers's house, south side of river, 93 feet from edge of bank at point where high bank leaves river, north of river road; iron post (U. S. C. E. b. m. No. 338)	282.57
T. 13 S., R. 18 E., 2.1 miles southwest of Herndon Southern Pacific R. R. bridge, south side of river road, 35 feet south of top of south river bank, 30 feet north of northeast corner of Ben Ipstein's house, 3,300 feet north and 1,100 feet east of southwest corner of sec. 1; iron post (U. S. C. E. b. m. No. 339)	283.67
T. 13 S., R. 18 E., 3,300 feet north and 300 feet west of southeast corner of sec. 3, in row of eucalyptus trees, 300 feet west of Jamesan Ave., on dividing line between peach and apricot orchards, on property of Alec. Meneely, just south of road along river bank: iron post (U. S. C. E. b. m. No. 340)	260.24

Precise leveling by C. H. Semper in 1901

From Bullard quadrangle southeast along Southern Pacific R. R. into Malaga quadrangle

	Feet
Milepost 202, 245 feet south of, west side of track, at edge of highway; iron post stamped "296 B"	296.408
Fresno, in west face of passenger station, south of door to gentlemen's waiting room; aluminum tablet stamped "290 B"	290.475
Fresno, opposite south end of passenger station; top rail of main line	287.6
Fresno, 1 mile south of, at Cherry Ave. crossing; top of rail	286.8
Fresno, 2.3 miles south of, 14 feet south of milepost 208, west side of track, at edge of highway; iron post stamped "286 B"	286.910
Crossing of Santa Fe and Southern Pacific railroads; top of rail	290.8

FRIANT QUADRANGLE

[Latitude 36° 52′ 30″–37°; longitude 119° 37′ 30″–119° 45′]

FRESNO AND MADERA COUNTIES

Primary leveling by L. F. Biggs in 1919

From point near northeast corner of Clovis quadrangle along highways north and west to Gordon, in south part of Friant quadrangle, thence south to Clovis

	Feet
Gordon, 4 miles east and 1 mile south of, 1,000 feet west of Smith's ranch house, 50 feet east of angle in power line south, south of road, in concrete post; bronze tablet stamped "83 1919 B B 409"	409.554
Gordon, 3.6 miles east of, 100 feet west of substation, in base of concrete; chiseled "U. S. 403"	403.55
Gordon, 3 miles east of, at T road south, in power pole 10 painted "U. S. 391"; spike	391.67
Gordon, 2 miles east of, south of road, at T fence south, in concrete post; bronze tablet stamped "1919 B B 84 394"	394.319
Gordon, 1 mile east of, 40 feet southwest of T road south, in corner fence post painted "U. S. 393"; spike	393.66
Gordon, 150 feet north of, south end of switch, at west edge of railroad right of way; iron post stamped "391"	391.611
Setch, 1 mile north of, east side of road, in power pole 76, painted "U. S. 375"	375.55

From point 1 mile east of Gordon along railroad northeast to Shipp, thence east to Academy quadrangle

Gordon, 1 mile east of, 40 feet southwest of T road south, in corner fence post painted "U. S. 393"; spike	393.66
El Prado, 1 mile northeast of, 40 feet east of road crossing, in base of telephone pole painted "U. S. 408"; spike	408.79
El Prado, 2 miles northeast of, in base of milepost 2 painted "U. S. 418"; spike	418.96
El Prado, 3 miles northeast of, in base of milepost 3 painted "U. S. 433"; spike	433.71
El Prado, 4 miles northeast of, in base of milepost 4 painted "U. S. 437"; spike	437.79

	Feet
Shipp, 0.2 mile west of, 15 feet south of track, 100 feet south of and 40 feet above highway, at rocky point, in ledge; bronze tablet stamped "107 1919 B B 437"	437.526
Shipp, opposite signboard; top of rail	426.67
Shipp, 0.6 mile east of, 100 feet east of crossing of track and highway; summit of boulder painted "U. S. 406"	406.21
Shipp, 1.6 miles east of, east side of road, in base of 24-inch oak tree scribed "U. S. 531"; spike	531.71
Sharpsville, 2 miles southwest of, north of road, in telephone pole painted "U. S. 659"; spike	659.60

Primary leveling by L. D. Ryus in 1901 and by L. F. Biggs twice in 1908

From Clovis quadrangle north along highways through west part of Friant quadrangle into Sulphur Springs quadrangle (leveled three times)

Pollasky, 450 feet south of station, opposite milepost 231, at east edge of right of way of railroad; iron post stamped "337"	339.985
Pollasky, northeast corner of bridge over San Joaquin River, on concrete guard, 5 feet from fence corner; aluminum tablet stamped "U"	330.864

GOSHEN QUADRANGLE

[Latitude 36° 15′–36° 22′ 30″; longitude 119° 22′ 30″–119° 30′]

KINGS AND TULARE COUNTIES

Primary leveling by H. S. Senseney in 1923

Along south border of quadrangle (east portion of line leveled twice)

	Feet
T. 19 S., R. 23 E., at northwest corner of crossroads, at corner of secs. 21, 22, 27, and 28, in fence post; railroad spike, marked "U. S. B. M. 257.7"	258.61
T. 19 S., R. 23 E., at southwest corner of crossroads, at corner of secs. 22, 23, 26, and 27, in fence post; railroad spike, marked "U. S. B. M. 260.7"	261.61
T. 19 S., R. 23 E., 20 feet south by 25 feet east of T road south, at corner of secs. 23, 24, 25, and 26; iron post stamped "12 S 1923"	267.654
Reference mark, 12 feet west of post, in fence post; railroad spike	267.42
T. 19 S., R. 23 E., at quarter corner between secs. 24 and 25, at northwest corner of T road west, in telephone pole; railroad spike "U. S. B. M. 270.7"	271.67
T. 19 S., R. 23 E., at quarter corner at center of sec. 24, at southwest corner of T road south, in fence post; railroad spike, marked "U. S. B. M. 271.2"	272.206
T. 19 S., Rs. 23 and 24 E., at quarter corner between secs. 19 and 24, in northeast corner of T road north, in concrete base of property corner; chiseled square, marked "U. S. B. M. 274.3"	275.32
T. 19 S., R. 24 E., near quarter corner between secs. 19 and 20, on north side of road, at west end of gate; iron post stamped "R. S. 1923"	280.191
T. 19 S., R. 24 E., at southeast corner of T road south, at quarter corner between secs. 20 and 21, in telephone pole; railroad spike, marked "U. S. B. M. 285.5"	286.54

Along west border of quadrangle

	Feet
T. 19 S., R. 23 E., 20 feet south by 35 feet west of crossroads, at corner of secs. 20, 21, 28, and 29; iron post stamped "9–S–1923"	251.524
Reference mark, 90 feet southeast of post, in root of tree; copper nail and washer	250.40
T. 19 S., R. 23 E., at corner of secs. 16, 17, 20, and 21, at southwest corner of crossroads, in telephone pole; railroad spike, marked "U. S. B. M. 252.2"	253.07
T. 19 S., R. 23 E., at corner of secs. 8, 9, 16, and 17, at southeast corner of T road east, in fence post; railroad spike marked "U. S. B. M. 254.5"	255.42
T. 19 S., R. 23 E., at corner of secs. 4, 5, 8, and 9, 30 feet north by 30 feet west of crossroads; iron post stamped "10–S–1923"	257.942
Reference mark, 40 feet west by 110 feet south of post, in root of tree; copper nail and washer	257.99
Tps. 18 and 19 S., R. 23 E., at corner of secs. 4, 5, 32, and 33, at southwest corner of crossroads, in telephone pole; railroad spike, marked "U. S. B. M. 257.6"	258.46
T. 18 S., R. 23 E., at corner of secs. 28, 29, 32, and 33, at northwest corner of crossroads, in telephone pole; railroad spike, marked "U. S. B. M. 260.2"	261.09
T. 18 S., R. 23 E., at corner of secs. 20, 21, 28, and 29, 25 feet south by 40 feet west of crossroads; iron post stamped "11 S 1923"	261.300
Reference mark, 18 feet east of post, in telephone pole; railroad spike	260.94
T. 18 S., R. 23 E., quarter corner between secs. 16 and 17, in top of 4 by 4 inch corner post; copper nail and washer, marked "U. S. B. M. 259.1"	259.98

Primary leveling by F. R. Swearingen in 1923

Along north border of quadrangle

T. 18 S., R. 24 E., at corner of secs. 8, 9, 16, and 17, south side of road in corner post of T fence south; railroad spike, marked "U. S. B. M. 295.7"	296.08
T. 18 S., R. 24 E., at corner of secs. 7, 8, 17, and 18, 1,320 feet north by 20 feet east of junction with T road north, in corner fence post; railroad spike, marked "U. S. 290.9 B. M."	291.35
T. 18 S., Rs. 23 and 24 E., at corner of secs. 7, 12, 13, and 18, 20 feet east by 30 feet south of junction with T road south, in corner fence post; railroad spike, marked "U. S. 284.3 B. M."	284.74
Milepost 239, 10 feet south of, west side of track, at edge of highway; iron post stamped "280 B"	280.457

Primary leveling by R. B. Steele in 1923

T. 18 S., R. 23 E., in northwest corner of sec. 13, in southeast angle of T road south, in base of power pole; railroad spike, painted "U. S. 276.9 B. M."	277.48
T road south; gate post south, painted "274.0"	274
T. 18 S., R. 23 E., in southeast corner of sec. 11, on north side of east and west road, at north and south fence line, in base of east gate post; railroad spike, post painted "U. S. 272.6 B. M."	273.13

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	Feet
T. 18 S., R. 23 E., at quarter corner between secs. 10 and 15, in base of south gate post of fence line south; railroad spike, painted "U. S. 268.1 B. M."	268.70
T. 18 S., R. 23 E., 40 feet south of northwest corner of sec. 15, 1 foot east of fence line; iron post stamped "R. S. 1923," fence post 2 feet southwest painted "U. S. 265.5 P. B. M."	266.082
Reference mark, 45 feet northeast of P. B. M., in base of fence post, in fence line east; railroad spike	265.60
T. 18 S., R. 23 E., near corner of secs. 8, 9, 16, and 17, on west bank of east branch of Cross Creek, in root of 36-inch willow tree; copper nail and washer, tree painted "U. S. 258.4 B. M."	258.978

Along Southern Pacific R. R. from north border of quadrangle to milepost 242

Reference mark, 840 feet north of P. B. M., east head wall of concrete culvert, top of south end; chiseled square	281.98
Goshen, 1.25 miles north of, 450 feet north of milepost 238, on west side of Southern Pacific R. R. track, 2 feet east of right of way fence; iron post stamped "280 B"	280.457
Goshen, 350 feet north of Southern Pacific R. R. station, on east side of track, in base of milepost 239; railroad spike, pole north painted "U. S. 283.3 B. M."	283.94
Goshen, 1 mile south of, on east side of Southern Pacific R. R. track, in base of milepost 240; railroad spike, painted "U. S. 283.0 B. M."	283.65
Goshen, 1.85 miles south of, 760 feet north of milepost 241, on east side of Southern Pacific R. R. track; iron post stamped "286 B"	286.817
Reference mark, 400 feet south of P. B. M., east head wall of concrete culvert, top of south end; chiseled square	286.13
Goshen, 3 miles south of, on east side of Southern Pacific R. R. track, 200 feet south of milepost 242, on east edge of State highway, east head wall of concrete culvert, center of top; chiseled square, fence east painted "U. S. 288.8 B. M."	289.51

Primary leveling by F. R. Swearingen in 1923

From Southern Pacific R. R. milepost 241 east along highway to east border of quadrangle

Goshen, 1.4 miles southeast of, opposite milepost 241, east side of track, at edge of highway; iron post stamped "286 B"	286.817
Reference mark, 400 feet south of P. B. M., east head wall of concrete culvert, top of south end; chiseled square	286.14
T. 18 S., R. 24 E., at corner of secs. 28, 29, 32, and 33, at T road north, in corner post of T fence south; railroad spike, marked "U. S. 296.4 B. M."	296.91

EXETER, GOSHEN, LEMONCOVE, NO. 35, AND VISALIA QUADRANGLES

[Latitude 36° 15′–36° 30′; longitude 119°–119° 30′]

TULARE COUNTY

Primary leveling by W. V. Hardy in 1902 and by R. A. Farmer in 1904–5

From Goshen east via Southern Pacific R. R. to Visalia

	Feet
Goshen, 0.4 mile south of, east side of track, opposite milepost 241; spike in telegraph pole	283.14

	Feet
Goshen, 3.62 miles east of, about 600 feet south of G. D. Smith's ranch house, 60 feet southeast of crossing, 30 feet south of track, north of road, 3 feet west of telegraph pole; iron post stamped "307 G"	307.526
Visalia courthouse, east entrance, at foot of steps; center of the letter "G" in the name "Gay" on cement sidewalk	331.01
Visalia courthouse, at east side of steps at south entrance, in granite baluster; aluminum tablet stamped "334 G"	334.363

From Visalia east along county road to Lemoncove

Mineral King ranch house, 500 feet west of, in northeast angle of road junction, near corner fence post; iron post stamped "362 G"	362.330
Lemoncove, 8.87 miles west of, 60 feet southwest of crossing, near junction of railroad fence with wagon-road fence; iron post stamped "388 G"	388.508
Lemoncove, 4.76 miles west of, 50 feet southwest of Tom Hushback's ranch house, northeast angle of road junction, 1.5 feet southeast of southwest corner of yard; iron post stamped "420 G"	420.325
Lemoncove School, 2 feet east of, midway between north and south entrances; iron post stamped "510 G" (redetermined 1923)	511.753

From Portersville northwest along highway and Southern Pacific R. R. to point east of Visalia

Portersville School, south side of, 6 inches east of entrance, 12 inches above porch floor; aluminum tablet stamped "458 G"	458.554
Sam Bend's saloon, 1.15 miles south of, 70 feet southwest of road intersection, 30 inches east of telephone pole; iron post stamped "396 G"	396.881
Lindsay School, south side of, 24 inches east of entrance, 18 inches above ground; aluminum tablet stamped "383 G"	383.127
Exeter, 3.25 miles south of, 90 feet north of crossing, 30 inches east of railroad fence, 36 inches southeast of electric power line pole; iron post stamped "353 G"	355.147
Exeter School, north of steps at northwest entrance, in west face of granite baluster, 24 inches above ground; aluminum tablet stamped "391 G"	391.025
Exeter, in front of station; top of east rail	387.0

From crossroads 3 miles west of Lemoncove southeast via wagon road to Yokohl School

James Hamilton's ranch house, 1.21 miles south of, northwest angle of road junction, near corner of fence; iron post stamped "499 G"	499.626

From Portersville west along highway to Tipton

Portersville, 1 mile south by 1.5 miles west of, south side of road, Percell ranch; iron post stamped "433"	433.436
Poplar, 2 miles east of, 4.5 miles west by 1 mile south of Portersville, at southeast corner of road crossing, 8 feet south of telephone pole; iron post stamped "396"	396.612
Tipton, 5 miles east of, 4 miles west of Poplar, northwest corner of pasture, southwest corner of road crossing; iron post stamped "328"	328.541

GOSHEN, HANFORD, LEMOORE, NO. 33, AND NO. 34 QUADRANGLES

[Latitude 36° 15′–36° 22′ 30″; longitude 119° 22′ 30″–120°]

FRESNO, KINGS, AND TULARE COUNTIES

Primary leveling in 1903 by W. V. Hardy

From Goshen west along wagon road to Lemoore, thence west along Southern Pacific R. R. to bench mark 4 miles west of Lethent

	Feet
Goshen, 6.34 miles west of, 100 feet northwest of road crossing, 50 feet north of track, 2 feet east of corner of railroad fence; iron post stamped "251 G"	251.698
Hanford, 4.58 miles northeast of, northwest angle of road intersection; iron post stamped "255 G"	255.265
Hanford, Kings County courthouse, east side of south entrance, in granite baluster; aluminum tablet stamped "250 G"	250.885
Armona School, 180 feet northwest of, south of gate, at northwest corner of yard; iron post stamped "237 G"	237.711
Lemoore, Union High School, north side of east entrance, in foundation wall, 1 foot above surface of ground; aluminum tablet stamped "223 G"	223.699
Lethent, 60 feet northwest of barn, south of track, 2.5 feet east of telegraph milepole 267; iron post stamped "219 G"	219.635
Lethent, 4 miles southwest of, 4 feet east of telegraph milepole 271, south of track; iron post stamped "250 G"	250.618

GREGG QUADRANGLE

[Latitude 36° 52′ 30″–37°; longitude 119° 52′ 30″–120°]

MADERA COUNTY

Primary leveling by L. F. Biggs in 1919

From Madera quadrangle east along highways near south border to milepost 190 of Southern Pacific R. R.

	Feet
T. 12 S., R. 18 E., south side of sec. 14, 30 feet northeast of cross-roads, 100 feet northwest of railroad crossing 191 AB, on line between State highway and Southern Pacific R. R., in top of concrete highway boundary post chiseled "U. S. 277"; copper nail	277.70
Milepost 190, opposite fifth telephone pole north of, west side of track, at edge of highway; iron post stamped "273 B"	274.457

From Southern Pacific R. R. east along highways near south border of quadrangle into Lanes Bridge quadrangle (leveled twice)

T. 12 S., R. 18 E., northwest corner of sec. 24, south edge of road; top of 1-inch gas pipe stamped "284"	284.05
T. 12 S., R. 19 E., southeast corner of sec. 13, at road south, in corner fence post scribed "U. S. 289"; spike	289.82
Gregg, east margin of Atchison, Topeka & Santa Fe Ry., at north edge of highway, 50 feet northeast of crossing, 350 feet southeast of Greenleaf triangulation station, in concrete post; aluminum tablet stamped "293 1919 B B 15"	293.192
Gregg, 1.4 miles east of, south of road, at T road south, in telephone pole scribed "U. S. 299"; spike	299.64
Gregg, 2.4 miles east of, north of road, at T road north, in corner fence post scribed "U. S. 309"; spike	309.07

HANFORD QUADRANGLE

[Latitude 36° 15′–36° 22′ 30″; longitude 119° 37′ 30″–119° 45′]

KINGS COUNTY

Primary leveling by R. B. Steele in 1923

From Hanford north along east border of quadrangle into Laton quadrangle

	Feet
Hanford, Kings County courthouse, east side of south entrance, in granite balustrade; aluminum tablet stamped "250 G"	250.885
Hanford, East Seventh St. and State highway, east edge of intersection, T. 18 S., Rs. 21 and 22 E., corner of secs. 25, 30, 31, and 36; top of iron stake marking section corner, telephone pole southeast painted "U. S. 245.8 B. M."	246.42
Hanford, 1 mile north of East Seventh St. on State highway, in northwest angle of crossroads, in concrete base of gas station, on top at northeast end; chiseled square, telephone pole southeast painted "U. S. 250.3 B. M."	250.681
T. 18 S., Rs. 21 and 22 E., quarter corner between secs. 19 and 24; iron stake marking quarter corner, top of fence painted "253.6"	254.0
T. 18 S., Rs. 21 and 22 E., corner of secs. 13, 18, 19, and 24, junction with T road east; top of iron stake marking section corner, painted "U. S. 250.6 B. M."	251.00
Junction with T road east; top of iron stake, painted "250.4"	250.7
Reference mark, 200 feet south of P. B. M., top of east end of concrete culvert; chiseled square	255.46
T. 18 S., R. 22 E., southwest corner of sec. 7, in northeast angle of crossroads; iron post stamped "Prim. Trav. Sta. No. 7 R. S. 1923," fence painted "U. S. 254.9 P. B. M."	255.262

Along north border of quadrangle

Center of T road south, painted "252.1"	253
T. 18 S., R. 21 E., in northeast corner of sec. 14, in southwest angle of crossroads, in base of corner fence post; wrought-iron nail, painted "U. S. 253.1 B. M."	253.65
Center of road crossing on Atchison, Topeka & Santa Fe Ry. track; top of east rail, painted "256.0"	257
Reference mark, 40 feet northwest of P. B. M.; iron stake at center of crossroads	254.17
T. 18 S., R. 21 E., in northwest corner of sec. 14, in southeast angle of crossroads, at Lucerne School; iron post stamped "Prim. Trav. Sta. No. 6 R. S. 1923," painted "U. S. 254.3 P. B. M."	254.866
T. 18 S., R. 21 E., in northwest corner of sec. 15, in southeast angle of crossroads, in base of corner fence post; railroad spike, pole east painted "U. S. 249.4 B. M."	249.91
T. 18 S., R. 21 E., at corner of secs. 8, 9, 16, and 17, center of crossroads; iron stake marking section corner, guy post northwest painted "U. S. 240.5 B. M."	241.07
Center of road crossing on Southern Pacific R. R.; top of east rail, tie painted "243.6"	244
T. 18 S., R. 21 E., in southwest corner of sec. 8, in northeast angle of crossroads; iron post stamped "Prim. Trav. Sta. No. 5 R. S. 1923," painted "U. S. 240.0 P. B. M."	240.586
Lemoore Canal, center of bridge over, painted "241.9"	242.5

	Feet
T. 18 S., R. 20 E., in northeast corner of section 13, in southwest angle of crossroads, in base of power pole; railroad spike, painted "U. S. 235.9 B. M."	236.481
Center of bridge over slough; not painted	236

Primary leveling by H. S. Senseney in 1923

From Hanford along east, south, and west borders of quadrangle to northwest corner of quadrangle

Hanford, Kings County courthouse, east side of south entrance, in granite balustrade; aluminum tablet stamped "250 G"	250.885
Hanford, at southeast corner of Seventh St. and Corcoran Highway, in telephone pole; railroad spike, marked "U. S. B. M. 245.7"	246.21
Tps. 18 and 19 S., Rs. 21 and 22 E., corner of secs. 1, 6, 31, and 36, at intersection of crossroads; iron plug in center of highway, marked "U. S. B. M. 244.4"	245.03
T. 19 S., Rs. 21 and 22 E., at corner of secs. 1, 6, 7, and 12, 20 feet north by 35 feet east of crossroads; iron post stamped "1 S 1923"	242.734
Reference mark, 20 feet south by 35 feet west of post; iron plug in center of highway	241.05
T. 19 S., Rs. 21 and 22 E., at corner of secs. 7, 12, 13, and 18, 100 feet south of crossroads, in northeast corner of concrete culvert; bolthead, marked "U. S. B. M. 242.5"	243.25
T. 19 S., Rs. 21 and 22 E., corner of secs. 13, 18, 19, and 24, at intersection of crossroads; iron plug in center of highway, marked "U. S. B. M. 229.7"	230.52
T. 19 S., Rs. 21 and 22 E,, at corner of secs. 19, 24, 25 and 30, 20 feet north by 45 feet west of crossroads; iron post stamped "2 S 1923"	228.850
Reference mark, 20 feet south by 45 feet east of post, at intersection of crossroads; iron plug in center of highway	228.563
T. 19 S., R. 21 E., at corner of secs. 23, 24, 25, and 26, at northeast corner of crossroads, in telephone pole; railroad spike, marked "U. S. B. M. 226.2"	227.16
T. 19 S., R. 21 E., at corner of secs. 22, 23, 26, and 27, at southeast corner of crossroads, in stump; copper nail and washer, marked "U. S. B. M. 225.9"	226.85
T. 19 S., R. 21 E., at corner of secs. 21, 22, 27, and 28, 20 feet south by 20 feet east of T road south; iron post stamped "3 S 1923"	225.976
Reference mark, 50 feet northwest of post, in root of willow tree; copper nail and washer	228.65
T. 19 S., R. 21 E., corner of secs. 20, 21, 28, and 29, at intersection of crossroads; iron plug in center of highway, marked "U. S. B. M. 224.5"	225.44
T. 19 S., R. 21 E., at corner of secs. 19, 20, 29, and 30, at northwest corner of crossroads, in fence post; railroad spike, marked "U. S. B. M. 222.8"	223.73
T. 19 S., Rs. 20 and 21 E., at corner of secs. 19, 24, 25, and 30, 25 feet south by 20 feet west of crossroads; iron post stamped "4 S 1923"	220.255
Reference mark, 185 feet northeast of post, 10½ feet south of southeast corner of house, in root of locust tree, about 1 inch below surface of ground; copper nail and washer	220.10
T. 19 S., Rs. 20 and 21 E., corner of secs. 13, 18, 19, and 24, at intersection of crossroads; iron plug in center of highway, marked "U. S. B. M. 224.5"	225.38

	Feet
T. 19 S., Rs. 20 and 21 E., 60 feet east of crossroads, at corner of secs. 7, 12, 13, and 18, on south side of road, in root of poplar tree; copper nail and washer, marked "U. S. B. M. 227.6"	228.52
T. 19 S., Rs. 20 and 21 E., at corner of secs. 1, 6, 7, and 12, 40 feet south by 20 feet west of crossroads; iron post stamped "5 S 1923"	231.103
Reference mark, 50 feet east of post, at southeast corner of crossroads, in telephone pole; railroad spike	230.886
Tps. 18 and 19 S., Rs. 20 and 21 E., corner of secs. 1, 6, 31, and 36, at intersection of crossroads; iron plug in center of highway, marked "U. S. B. M. 236.5"	237.39
T. 18 S., Rs. 20 and 21 E., at corner of secs. 25, 30, 31, and 36, at southeast corner of T road south, in telephone pole; railroad spike, marked "U. S. B. M. 237.8"	238.71
T. 18 S., Rs. 20 and 21 E., at corner of secs. 19, 24, 25, and 30, 45 feet north by 20 feet west of T road north; iron post stamped "6 S 1923"	236.463
Reference mark, 45 feet south by 20 feet east of post, at junction with T road north, in center of highway; iron plug	237.05
T. 18 S., Rs. 20 and 21 E., at corner of secs. 13, 18, 19, and 24, at southeast corner of T road south, in telephone pole; railroad spike, marked "U. S. B. M. 233.8"	234.63
T. 18 S., R. 20 E., in northeast corner of sec. 13, in southwest angle of crossroads, in base of power pole; railroad spike, painted "U. S. 235.9 B. M."	236.481

Through center of quadrangle via Armona to Hanford

Tps. 18 and 19 S., R. 21 E., corner of secs. 5, 6, 31, and 32, at intersection of crossroads, in center of highway; iron plug, marked "U. S. B. M. 236.2"	237.11
T. 18 S., R. 21 E., at corner of secs. 28, 29, 32, and 33, at northeast corner of crossroads, in concrete culvert; chiseled square, marked "U. S. B. M. 240.9"	241.38
T. 18 S., R. 21 E., at corner of secs. 27, 28, 33, and 34, 25 feet south by 30 feet east of crossroads; iron post stamped "30 S 1923"	241.211
Reference mark, 120 feet west of post, on south side of road, in concrete culvert; chiseled square	244.36
T. 18 S., R. 21 E., at corner of secs. 26, 27, 34, and 35, at intersection of crossroads, in center of highway; iron plug, marked "U. S. B. M. 242.1"	242.60
T. 18 S., R. 21 E., at corner of secs. 25, 26, 35, and 36, at southeast corner of crossroads, in curb; chiseled square, marked "U. S. B. M. 244.8"	245.25

QUADRANGLE INCLUDING BURREL, HANFORD, LATON, LEMOORE, NO. 33, NO. 34, RIVERDALE, AND STRATFORD QUADRANGLES

[Latitude 36°–36° 30′; longitude 119° 30′–120°]

FRESNO AND KINGS COUNTIES

Primary leveling by Corps of Engineers, U. S. Army, in San Joaquin Valley in 1913–14

	Feet
T. 20 S., R. 20 E., 20 feet northwest of southeast corner of sec. 33, south side of levee, Mount Diablo base and meridian; iron post set in concrete (U. S. C. E. b. m. No. 301)	190.63

	Feet
T. 19 S., R. 19 E., near southeast corner of sec. 33, 50 feet south of San Joaquin Light & Power Co.'s line pole 1069, approximately 1 mile south of Henrietta subdivision; iron post set in concrete (U. S. C. E. b. m. No. 302)	229.75
T. 20 S., R. 20 E., southwest of northwest corner of sec. 3, at corner of fence, southwest of road intersection; iron post set in concrete (U. S. C. E. b. m. No. 303)	209.78
T. 20 S., R. 22 E., 600 feet east of Cross Creek, at intersection of north and south and west fence lines, 2 feet southwest of northeast corner of sec. 3; iron post set in cement (U. S. C. E. b. m. No. 304)	233.74
T. 18 S., R. 22 E., about 700 feet east of Cross Creek, 35 feet south of northeast corner of sec. 36, 2 feet west of north and south fence line, 5 feet south of property-line stake; iron post set in cement (U. S. C. & G. S. b. m. No. 305)	250.63
T. 18 S., R. 19 E., about 4,000 feet east of San Jose Slough, on Heinley ranch, 50 feet northeast of southwest corner of sec. 36; iron post set in cement (U. S. C. E. b. m. No. 306)	213.53
Standard Oil Co.'s Lethent pumping station, about 0.75 mile southeast of, 25 feet south of fourth pole south of milepost 86 of Standard Oil Co.'s telephone line; iron post set in cement (U. S. C. E. b. m. No. 307)	246.22
Standard Oil Co.'s Lethent pumping station, 4.5 miles northeast of, 25 feet southwest of San Joaquin Light & Power Co.'s pole 900 where power line running southeast turns south on section line, about 1,500 feet west of San Jose Slough; iron post set in cement (U. S. C. E. b. m. No. 308)	215.53
Lemoore, about 1.5 miles west of, at south edge of levee crown, 20 feet west of west end of middle bridge crossing Beall or Zalda Slough; iron post set in cement (U. S. C. E. b. m. No. 309)	211.89
Hardwick, about 1.75 miles west of, between road and railroad embankment, 50 feet east of east end of Hanford & Summit Lake Ry.'s bridge across Kings River; iron post set in cement (U. S. C. E. b. m. No. 310)	248.27
Harlow, about 0.5 mile east of, 10 feet north of southeast corner of yard at Kings River Methodist Episcopal Church; iron post set in cement (U. S. C. E. b. m. No. 311)	262.75
Harlow, about 5.5 miles east of, beside fence, 15 feet west of southeast corner of Excelsior School yard; iron post set in cement (U. S. C. E. b. m. No. 312)	266.17
T. 17 S., R. 21 E., north side of road, 40 feet northeast of northeast corner of sec. 5, about 850 feet east of Atchison, Topeka & Santa Fe Ry. main line; iron post set in cement (U. S. C. E. b. m. No. 313)	258.240
T. 17 S., R. 20 E., 30 feet north of northeast corner of sec. 4, about 2 miles northeast of Cando, north side of road, 4 feet east of California Auto Association sign; iron post set in cement (U. S. C. E. b. m. No. 314)	238.270
T. 17 S., R. 20 E., 35 feet northeast of northwest corner of sec. 6, in fence corner of Burrel road and Riverdale road; iron post set in cement (U. S. C. E. b. m. No. 315)	236.460

	Feet
T. 16 S., R. 18 E., 35 feet northwest of southwest corner of sec. 36, in fence corner, northwest corner of Burrel road and Raisin City road, about 1.5 miles east of Burrel; iron post set in cement (U. S. C. E. b. m. No. 316)	211.665

Primary leveling by W. V. Hardy in 1907

From Hanford south along Atchison, Topeka & Santa Fe Ry. to Corcoran (checked spur line)[1]

Hanford, east side of entrance to courthouse, in top of stone balustrade; bronze tablet stamped "250"	250.885
Hanford, 1.2 miles south of, 50 feet northwest of road crossing, 75 feet south of telegraph pole (M. P. 967), in base of telephone pole painted "U. S. G. S. b. m. 240"; spike	240.46
Hanford, 2 miles south of, at Brown's brickyard, west side of track, in base of telegraph pole; railroad spike marked "U. S. G. S. b. m."	242.32
Hanford, 3.4 miles south of, west side of track, in base of telegraph pole painted "U. S. B. M. 232"; railroad spike	232.50
Odessa, 350 feet south of signboard, west side of track, in base of telegraph pole (M. P. 964) painted "U. S. G. S. b. m. 232"; railroad spike	232.92
Odessa, 40 feet west of railroad, 15 feet north of wagon road, sec. 13, T. 19 S., R. 21 E.; iron post stamped "232 H"	232.439
Odessa, 1 mile south of, west side of track, in base of telegraph pole painted "U. S. G. S. b. m. 228"; railroad spike	228.01
Guernsey, 2 miles north of, west side of track, in base of telegraph pole (M. P. 962) painted "U. S. G. S. b. m. 222"; railroad spike	222.36
Guernsey, 1 mile northwest of, west side of track, in base of telegraph pole (M. P. 961) painted "U. S. G. S. b. m. 219"; railroad spike	219.41
Guernsey, in top of second post south of small flower lot; nail	223.75
Guernsey, 80 feet north of station, 30 feet west of track, at southeast corner of small park; iron post stamped "221 H"	221.391
Guernsey, 1 mile southeast of, west side of track, in base of telegraph pole (M. P. 959) painted "U. S. G. S. b. m. 216"; railroad spike	216.11
Guernsey, 2 miles southeast of, west side of track, in base of telegraph pole (M. P. 958) painted "U. S. G. S. b. m. 215"; railroad spike	215.78
Guernsey, 3 miles southeast of, west side of track, in base of telegraph pole (M. P. 957) painted "U. S. G. S. b. m. 213"; railroad spike	213.86
Cross Creek, on trestle; top of west rail	218.90
Guernsey, 4 miles southeast of, west side of track, in base of telegraph pole (M. P. 956) painted "U. S. G. S. b. m. 214"; railroad spike	213.97
Guernsey, 5 miles southeast of, west side of track, in base of telegraph pole (M. P. 955) painted "U. S. G. S. b. m. 210"; railroad spike	210.86
Bean, 1,000 feet northwest of, west side of track, in base of telegraph pole (M. P. 954) painted "U. S. G. S. b. m. 211"; spike	211.74

[1] Permanent bench marks are on unchecked side shots.

	Feet
Bean, 1,000 feet northwest of station, 45 feet west of railroad track, 40 feet north of wagon road, on north boundary of sec. 3, T. 21 S., R. 22 E.; iron post stamped "211 H"	211.438
Corcoran, 2.1 miles northwest of, west side of track, in base of telegraph pole (M. P. 953) painted "U. S. G. S. b. m. 208"; railroad spike	208.56
Corcoran, 1.1 miles northwest of, west side of track, in base of telegraph pole (M. P. 952) painted "U. S. G. S. b. m. 204"; railroad spike	204.479
Corcoran, 0.5 mile northwest of, at road crossing; top of rail	208.5
Corcoran, hydrant at south end of schoolhouse; top of coupling	205.14
Corcoran, hotel, at foot of east stairway; north edge of east end of concrete doorsill	205.40
Corcoran, east side of schoolhouse, near south end of steps; iron post stamped "203 H"	203.427

HERNDON QUADRANGLE

[Latitude 36° 45′–36° 52′ 30″; longitude 119° 52′ 30″–120°]

FRESNO AND MADERA COUNTIES

Primary leveling by L. F. Biggs in 1919

Near Herndon, connecting U. S. Army Engineers' bench mark with U. S. Geological Survey precise line

	Feet
Herndon, 0.7 mile northwest of, 500 feet southeast of southeast corner of Southern Pacific R. R. bridge over San Joaquin River; iron post stamped "U. S. E. D. 337 Elev. 289.02"	285.901
Herndon, 0.3 mile southeast of, at road crossing near milepost 196; iron post stamped "300" (Bull. 342, p. 17)	300.649

From point near northeast corner of Kearney Park quadrangle north along highways near west border of Herndon quadrangle and east to point near milepost 199 on Southern Pacific R. R. in Bullard quadrangle.

T. 14 S., R. 19 E., northwest corner of sec. 2, 40 feet southeast of road crossing, in top of concrete retaining wall to canal, bronze tablet stamped "268 B B 1919 42"	268.143
T. 13 S., R. 19 E., northeast corner of sec. 34, 40 feet southwest of crossroads, south end of concrete culvert; chiseled "U. S. 271"	271.97
T. 13 S., R. 19 E., northwest corner of sec. 26, 40 feet southeast of crossroads, in base of power pole 320, painted "U. S. 283"; spike	283.31
T. 13 S., R. 19 E., southwest corner of sec. 14, 40 feet northeast of crossroads, in base of power pole 303, painted "U. S. 285"; spike	285.31
Road crossing 199 E. D. (Biola branch); top of rail	293.4

KEARNEY PARK QUADRANGLE

[Latitude 36° 37′ 30″–36° 45′; longitude 119° 52′ 30″–120°]

FRESNO COUNTY

Primary leveling by L. F. Biggs in 1919

From Kerman quadrangle east along highways near north border of Kearney Park quadrangle to point near northeast corner, thence north into Herndon quadrangle

	Feet
Floyd, 25 feet northwest of signboard, south edge of Whites Bridge road, north edge of Southern Pacific R. R. right of way; iron post stamped "U. S. E. D. 335 Elev. 244.9" (U. S. E. D. elev.= 244.88) (destroyed)	241.735
Floyd, 1.3 miles east of, 30 feet southwest of crossroads, on south end of concrete culvert; chiseled square, marked "U. S. 249") (destroyed)	249.22
Floyd, 2.3 miles east of, 40 feet southwest of crossroads; south end of concrete culvert, painted "U. S. 250"	250.75
T. 14 S., R. 19 E., corner of secs. 5, 6, 7, and 8, 0.8 mile north by 1 mile west of Kearney Tower, 50 feet southwest of crossroads, in concrete post; bronze tablet stamped "252 1919 B B 41"	252.034
Kearney Tower, 0.8 mile north of, 40 feet southwest of crossroads, on south end of concrete culvert; chiseled square, marked "U. S. 256"	255.99
Highway bench mark 46 (elevation=257.25) (not described)	257.00
Kearney Tower, 0.8 mile north by 1 mile east of, 40 feet northwest of crossroads, in base of power pole painted "U. S. 263"; spike	263.21
T. 14 S., R. 19 E., southwest corner of sec. 2, 50 feet southeast of crossroads; iron post stamped "336 U. S. E. D. Elev. 270.0" (U. S. E. D. elev.=270.05)	266.857

From west border of quadrangle east and south to McMullin, thence southeast into Raisin quadrangle

Rugg, 3 miles south by 1 mile east of, north of road, at T fence north, in corner fence post painted "U. S. 229"; spike	229.58
McMullin, 2 miles north of, 100 feet southwest of crossroads, in power pole painted "U. S. 232"; spike	232.58
McMullin, 1 mile north of, east of road, in base of power pole painted "U. S. 228"; spike	228.06
McMullin, 0.5 mile north of, 200 feet north of second telephone pole north of crossing, west margin of railroad; iron post stamped "U. S. E. D. 326 228.4"	225.190
McMullin, 0.5 mile south of, in base of milepost 200 painted "U. S. 225"; spike	225.27
McMullin, 1.5 miles southeast of, in base of milepost 201 painted "U. S. 222"; spike	222.71
McMullin, 2.5 miles southeast of, in base of milepost 202 painted "U. S. 222"; spike	222.89

From McMullin southwest along highways into Helm quadrangle (leveled twice)

	Feet
McMullin, 0.5 mile northwest of, 200 feet north of second telephone pole north of railroad crossing; iron post stamped "U. S. E. D. 326, Elev. 228.4" (U. S. E. D. elev.=228.38)	225.190
McMullin, 0.9 mile southwest of, north of road, in post at end of fence scribed "U. S. 219"; (destroyed)	219.56
McMullin, 2 miles southwest of; top of 2-inch galvanized gas pipe (milepost) painted "U. S. 216"	216.56

From northeast corner south along highways near east border of quadrangle into Raisin quadrangle

T. 14 S., R. 19 E., northwest corner of sec. 14, 40 feet southeast of crossroads, east end of concrete culvert; chiseled square marked "U. S. 261"	261.16
T. 14 S., R. 19 E., northwest corner of sec. 23, 40 feet southeast of crossroads; top of iron manhole painted "U. S. 256"	256.22
T. 14 S., R. 19 E., northwest corner of sec. 26, 50 feet southeast of crossroads, in concrete post; bronze tablet stamped "252 73 1919 B B"	252.673
T. 14 S., R. 19 E., northwest corner of sec. 35, 40 feet southeast of crossroads, in base of power pole 436 painted "U. S. 249"; spike	249.28
T. 14 S., R. 19 E., southwest corner of sec. 35, 40 feet northeast of T road east, in base of telephone pole 451 painted "U. S. 246"; spike	246.22
T. 15 S., R. 19 E., southwest corner of sec. 2, 50 feet northeast of crossroads, in concrete post; bronze tablet stamped "243 74 1919 B B"	243.574
T. 15 S., R. 19 E., southwest corner of sec. 11, 40 feet northeast of crossroads, in base of power pole 483 painted "243"; spike	243.55

KLINK QUADRANGLE

[Latitude 36° 22′ 30″–36° 30′; longitude 119° 07′ 30″–119° 15′]

TULARE COUNTY

Primary leveling by F. R. Swearingen in 1923

Along south border of quadrangle

	Feet
T. 18 S., R. 25 E., at quarter corner of secs. 3 and 10, 36 feet south by 10 feet east of junction with T road south; iron post stamped "7 M 1923," marked "U. S. 344.1 B. M."	344.448
Reference mark, 70 feet north by 50 feet west of P. B. M., in telephone pole; spike	344.95
T. 18 S., R. 25 E., at corner of secs., 2, 3, 10, and 11, 30 feet south by 30 feet west of intersection or crossroads, in telephone pole; railroad spike, marked "U. S. 345.9 B. M."	346.26
T. 18 S., R. 25 E., at corner of secs. 1, 2, 11, and 12, 36 feet north by 78 feet west of corner of T fence south, in telephone pole; railroad spike, marked "U. S. 353.3 B. M."	353.58
T. 18 S., Rs. 25 and 26 E., at corner of secs. 1, 6, 7, and 12, at intersection of crossroads; iron plug, marked "U. S. 364.8 B. M."	365.11
Reference mark, 72 feet west of P. B. M., concrete culvert, on top of south head wall; chiseled square	368.03

	Feet
T. 18 S., R. 26 E., near quarter corner of secs. 6 and 7, south side of highway at curve; iron post stamped "16 M 1923"	367.070
T. 18 S., R. 26 E., at corner of secs. 5, 6, 7, and 8, 20 feet west by 5 feet north of T road north, in telephone pole; railroad spike marked "U. S. 373.8 B. M."	374.10
T. 18 S., R. 26 E., near center of sec. 5, on north side of road, about 400 feet east of house, in telephone pole; railroad spike, marked "U. S. 388.515 B. M."	388.80
Tps. 17 and 18 S., R. 26 E., at corner of secs. 32, 33, 4, and 5, 40 feet east by 20 feet north of intersection of crossroads, on top of north end of concrete culvert; chiseled square, marked "U. S. 394.2 B. M."	394.43
Reference mark, 36 feet west of P. B. M., in telephone pole; railroad spike	408.13
Tps. 17 and 18 S., R. 26 E., at corner of secs. 33, 34, 3, and 4, 55 feet east by 20 feet south of crossroads; iron post stamped "17 M 1923"	408.614
Near northwest corner of quadrangle	
Yettem, T. 17 S., R. 25 E., at north corner of secs. 3 and 4, 36 feet south by 25 feet west of junction with T road south, concrete and stone weir, top of south head wall; chiseled square, marked "U. S. 344.4 B. M."	344.71
East along north border of quadrangle	
T. 17 S., R. 26 E., near quarter corner of secs. 3 and 10, 100 feet southeast of Mud Spring, 600 feet northwest of windmill, at curve in highway; iron post stamped "20 M 1923."	452.795
T. 16 S., R. 26 E., near south quarter corner of sec. 33, 400 feet from curve in highway, concrete culvert, top of north end; chiseled square, marked "U. S. 442.3 B. M."	442.51
T. 16 S., R. 26 E., at quarter corner of sec. 32, 20 feet east of junction with T road north, center of highway; iron plug marked "U. S. 400.3 B. M."	400.52
Reference mark, 18 feet west by 10 feet south of P. B. M., concrete culvert, on top of north end; chiseled square	383.94
T. 17 S., R. 26 E., at north corner of secs. 5 and 6, 30 feet west by 20 feet north of junction with T road south; iron post stamped "21 M 1923"	382.633
T. 17 S., Rs. 25 and 26 E., at north corner of secs. 1 and 6, 12 feet north by 25 feet west of junction with T road south, on concrete culvert, top of north end; chiseled square, marked "U. S. 369.8 B. M."	369.98
Reference mark, 40 feet east by 30 feet north of P. B. M., in center of highway; iron plug	353.41
T. 17 S., R. 25 E., at north corner of secs. 1 and 2, at Seville School, in northeast corner of school yard; iron post stamped "22 M 1923"	353.106
T. 17 S., R. 25 E., at north corner of secs. 3 and 4, on concrete culvert, top of north head wall; chiseled square, marked "U. S. 345.9 B. M."	346.08

LANES BRIDGE QUADRANGLE

[Latitude 36° 52′ 30″–37°; longitude 119° 45′–119° 52′ 30″]

FRESNO AND MADERA COUNTIES

Primary leveling by L. F. Biggs in 1919

From Gregg quadrangle east along highways near south border of Lanes Bridge quadrangle to Lanes Bridge over San Joaquin River (leveled twice)

	Feet
Gregg, 3.4 miles east of, south of road, opposite house, in telephone pole painted "U. S. 328"; spike	327.89
T. 12 S., R. 18 E., southeast corner of sec. 14, at southeast corner of Webster School yard, at crossroads, in concrete post; bronze tablet stamped "334 1919 B B 16"	334.783
Webster School, 1 mile east of, T. 12 S., Rs. 19 and 20 E., corner of secs. 13, 24, 18, and 19, at crossroads, in gatepost painted "U. S. 344"; spike	344.35
Webster School, 2 miles east of, 50 feet northeast of crossroads, in corner fence post painted "U. S. 349"; spike	349.55
Webster School, 2.5 miles east of, at angle in road north, in large gatepost painted "U. S. 354"; spike	354.92
Webster School, 2.5 miles east by 1 mile north of, 50 feet southwest of T road south, in corner fence post scribed "U. S. 361"; spike	361.58
Webster School, 3.5 miles east by 1 mile north of, 1,000 feet north of Lanes Bridge over San Joaquin River, at T road north, in power pole marked "U. S. 362"; spike	362.38
T. 12 S., R. 20 E., in NE. ¼ sec. 16, at west end of Lanes Bridge across San Joaquin River, in east end of south concrete retaining wall; bronze tablet stamped "292 1919 B B 17"	292.150

From Lanes Bridge south along highways into Bullard quadrangle

San Joaquin River under Lanes Bridge; water level 10 a. m. May 7, 1919	273.1
Lanes Bridge, 0.9 mile southeast of, at T road west, in automobile signpost scribed "U. S. 301"; spike	301.24

LATON QUADRANGLE

[Latitude 36° 22′ 30″–36° 30″; longitude 119° 37′ 30″–119° 45′]

FRESNO AND KINGS COUNTIES

Primary leveling by L. F. Biggs in 1919

From Riverdale quadrangle east along highways near north border of Laton quadrangle into No. 30 quadrangle

	Feet
Road crossing 215 C–D; top of rail	242.0
T. 17 S., R. 20 E., north corner of secs. 1 and 2, at T road south, in corner fence post painted "U. S. 243"; spike	243.30
T. 16 S., R. 20 E., south corner of secs. 35 and 36, at angle in road north, on 4-inch iron pipe filled with concrete (section corner); top of bolt, "U. S. 242" scribed on fence post	242.891
T. 16 S., Rs. 20 and 21 E., south corner of secs. 31 and 36; top of 4-inch iron pipe filled with concrete (section corner); "U. S. 249" marked on 2 by 2 inch stake	249.70

	Feet
T. 16 S., R. 21 E., south corner of secs. 31 and 32, at T fence north, in corner fence post painted "U. S. 252"; spike	252.97
T. 17 S., R. 21 E., northeast corner of sec. 5, 850 feet east of Atchison, Topeka & Santa Fe Ry.; iron post stamped "U. S. E. D. No. 313, 261.3" (U. S. E. D. elev.=261.34)	258.240
T. 16 S., R. 21 E., southeast corner of sec. 32, at T road north, in corner fence post painted "U. S. 258"; spike	258.39
T. 17 S., R. 21 E., 600 feet east of northeast corner of sec. 3, on south end of concrete culvert; chiseled "U. S. 263"	264.06
T. 16 S., R. 21 E., southeast corner of sec. 33, 100 feet west of angle in road north, in power pole painted "U. S. 262"; spike	261.82
T. 16 S., R. 21 E., south corner of secs. 34 and 35, 6 feet west of T fence north; top of 4-inch iron section-corner pipe filled with concrete	261.896
T. 16 S., R. 21 E., southwest corner of sec. 36, at road north, in gate post painted "U. S. 269"; spike	269.55

Primary leveling by R. B. Steele in 1923

From center of west border of quadrangle east to Laton, thence north to north border of quadrangle

Center of culvert over irrigation ditch; telephone pole painted "243.5"	244
Reference mark, 600 feet west of P. B. M., concrete culvert, on top of north head wall; chiseled square	245.43
T. 17 S., R. 21 E., in southwest corner of sec. 19, northeast angle of T road north, at southeast corner of Grant School yard; iron post stamped "Prim. Trav. Sta. No. 18 R. S. 5 1923," fence painted "U. S. 242.9 P. B. M."	243.202
T. 17 S., R. 21 E., 0.25 mile west of corner of secs. 19, 20, 29, and 30, in southeast angle of private T road south, 500 feet west of public road south, inside fence, in root on north side of large sycamore tree; spike, painted "U. S. 247.2 B. M."	247.55
Center of bridge over irrigation canal, painted "251.6"	252
T. 17 S., R. 21 E., 60 feet west by 30 feet south of quarter corner on north side of sec. 29, 280 feet west of Southern Pacific R. R. track, inside pasture, in root on north side of willow tree; spike, telephone pole east painted "U. S. 249.2 B. M."	249.53
Laton, 1.25 miles west of, 250 feet east of crossroads, concrete culvert on top of north end; chiseled square, fence post 30 feet northeast painted "U. S. 256.5 B. M."	256.80
Laton, 0.44 mile west of, in Y of road forks, top of concrete culvert, at center of south end; chiseled square, bridge railing painted "U. S. 253.1 B. M."	253.45
Laton, in southeast angle of Mount Whitney and Fowler avenues; iron post stamped "Prim. Trav. Sta. No. 17 R. S. 6 1923," telephone pole painted "U. S. 251.8 P. B. M."	252.119
Laton, 0.4 mile north of, at southwest corner of concrete bridge, top of west wing; chiseled square, painted "U. S. 257.2 B. M."	257.56
Laton, 0.9 mile north of, in northeast angle of T road east, in base of corner fence post; spike, painted "U. S. 249.8 B. M."	250.18
Laton, 1.6 miles north of, 0.7 mile north of T road east, east side of concrete bridge, on top at north end; chiseled square, bridge painted "U. S. 255.6 B. M."	255.92

	Feet
Laton, 2.13 miles north of, 0.75 mile south of crossroads, east head wall of concrete culvert, on top at north end; chiseled square, painted "U. S. 255.9 B. M."	256.25
Laton, 3 miles north of, in northeast angle of crossroads; iron post stamped "Prim. Trav. Sta. No. 20 R. S. 7 1923," painted "U. S. 254.9 P. B. M."	255.27
Laton, 4 miles north of, 300 feet south of T road, on east edge of Fowler Ave., on top of concrete culvert, center of east end; chiseled square, telephone pole 70 feet north painted "U. S. 262.0 B. M."	262.33
Along east border of quadrangle	
T. 18 S., Rs. 21 and 22 E., near quarter corner between secs. 7 and 12; center of culvert, painted "256.7"	257
T. 18 S., Rs. 21 and 22 E., corner of secs. 1, 6, 7, and 12, center of crossroads; top of iron stake marking section corner, painted "U. S. 262.4 B. M."	262.70
T. 18 S., Rs. 21 and 22 E., quarter corner between secs. 1 and 6; top of iron stake marking quarter corner, painted "261.5"	261.80
Tps. 17 and 18 S., Rs. 21 and 22 E., corner of secs. 1, 6, 31, and 36; top of iron stake marking section corner, painted "U. S. 260.7 B. M."	261.01
T. 17 S., Rs. 21 and 22 E., quarter corner between secs. 31 and 36; top of iron stake marking quarter corner, painted "259.8"	260.04
T. 17 S., R. 21 E., in southeast corner of sec. 25, in northwest angle of crossroads; iron post stamped "Prim. Trav. Sta. No. 8 R. S. 1923," painted "U. S. 265.4 P. B. M."	265.714
Center of highway at east-west fence line, painted "264.4"	265
T. 17 S., Rs. 21 and 22 E., corner of secs. 19, 24, 25, and 30, junction with T road east; top of iron stake marking section corner, painted "U. S. 267.4 B. M."	267.72
Kings River; center of bridge over, painted "275.6"	276
Kings River; water level, June 5, 1923	258
Center of crossroads, T. 17 S., Rs. 21 and 22 E., quarter corner between secs. 19 and 24, painted "265.9"	266
Reference mark, 120 feet south of P. B. M., in base of telephone pole; railroad spike	266.42
T. 17 S., Rs. 21 and 22 E., near corner of secs. 13, 18, 19, and 24, on west side of road, in line with T road east; iron post stamped "Prim. Trav. Sta. No. 9 R. S. 1923," painted "U. S. 267.6 P. B. M."	267.307
Center of bridge over slough, painted "270.4"	271
T. 17 S., Rs. 21 and 22 E., about 600 feet north of corner of secs. 7, 12, 13, and 18, east head wall of concrete culvert, center of top; chiseled square, painted "U. S. 267.2 B. M."	267.44
Reference mark, 600 feet south of P. B. M., concrete culvert, top of east end; chiseled square	266.37
T. 17 S., R. 22 E., in southwest corner of sec. 6, in northeast angle of crossroads; iron post stamped "Prim. Trav. Sta. No. 10 R. S. 1923," painted "U. S. 266.8 P. B. M."	266.973
T. 16 S., Rs. 21 and 22 E., at south corner of secs. 31 and 36, 40 feet southwest of T road north, in concrete post; bronze tablet stamped "271 B. B. 1919 71"	271.59

LEMONCOVE QUADRANGLE

[Latitude 36° 22′ 30″–36° 30′; longitude 119°–119° 07′ 30″]

TULARE COUNTY

Primary leveling by F. R. Swearingen in 1923

Along south border of quadrangle, thence north to Lemoncove

	Feet
Tps. 17 and 18 S., R. 26 E., at corner of secs. 2, 3, 34, and 35, 50 feet west by 25 feet south of intersection of road and Atchison, Topeka & Santa Fe Ry., in corner fence post; railroad spike marked "U. S. 421.4 B. M."	421.61
T. 18 S., R. 26 E., near corner of secs. 2, 3, 10, and 11, 250 feet south of milepost 33, Atchison, Topeka & Santa Fe Ry., in northwest corner of railroad bridge over St. Johns River; copper nail and washer, marked "U. S. 417.3 B. M."	417.51
Reference mark, 80 feet west of P. B. M., in telephone pole; railroad spike	407.03
T. 18 S., R. 26 E., at quarter corner of secs. 10 and 11, 35 feet north by 95 feet east of intersection of road and Southern Pacific R. R.; iron post stamped "23 M 1923"	408.497
T. 18 S., R. 26 E., at quarter corner of secs. 11 and 12, 36 feet west by 10 feet north of junction with T road west, in corner fence post; railroad spike, marked "U. S. 411.9 B. M."	412.14
T. 18 S., Rs. 26 and 27 E., 0.25 mile south of quarter corner of secs. 7 and 12, east side of road, in line with T road west, in telephone pole; railroad spike, marked "U. S. 417.2 B. M."	417.49
Lemoncove, 4.76 miles west of, 50 feet southwest of Tom Hushback's ranch house, northeast angle of road junction, 1.5 feet southeast of southwest corner of yard; iron post stamped "420 G"	420.325
T. 18 S., E. 27 E., near corner of secs. 7, 8, 17, and 18, north side of road, 500 feet southwest of private road to ranch house, in power pole; railroad spike, marked "U. S. 425.6 B. M."	425.85
T. 18 S., R. 27 E., at corner of secs. 8, 9, 16, and 17, 20 feet west by 20 feet south of intersection of crossroads, in telephone pole; railroad spike, marked "U. S. 449.8 B. M."	450.11
T. 18 S., R. 27 E., in sec. 9, on north side of road, 190 feet west of 30-inch oak tree, in telephone pole; railroad spike, marked "U S. 516.2 B. M."	516.51
Reference mark, 60 feet south of P. B. M., in telephone pole; railroad spike	478.80
T. 18 S., R. 27 E., at quarter corner of secs. 9 and 10, in northeast angle of T road east; iron post stamped "24 M 1923"	479.760
Lemoncove, 0.5 mile south of, T. 18 S., R. 27 E., at quarter corner of secs. 10 and 11, in line with T road north, in telephone pole; railroad spike, marked "U. S. 522.9 B. M."	523.16
Lemoncove School, 2 feet east of midway between north and south entrances; iron post stamped "510 G"	511.753

Along west border of quadrangle

Tps. 17 and 18 S., R. 26 E., at corner of secs. 2, 3, 34, and 35, 50 feet west and 25 feet south of intersection of road and Atchison Topeka & Santa Fe Ry., in corner fence post; railroad spike, marked "U. S. 421.4 B. M."	421.61

	Feet
Reference mark, 50 feet south of P. B. M., in center of highway; iron plug	435.53
Red Banks, T. 17 S., R. 26 E., at corner of secs. 26, 27, 34, and 35, 20 feet south by 8 feet east of milepost 31 Atchison, Topeka & Santa Fe Ry.; iron post stamped "18 M 1923"	435.899
T. 17 S., R. 26 E., near center of sec. 26, at curve in highway, 42 feet north of private road east, in 36-inch stump; copper nail and washer, marked "U. S. 444.1 B. M."	444.30
T. 17 S., R. 26 E., near quarter corner of secs. 23 and 26, on west side of road, in line with T fence east, in corner fence post; railroad spike, marked "U. S. 450.2 B. M."	450.43
T. 17 S., R. 26 E., at quarter corner of secs. 14 and 23, 25 feet north by 30 feet west of intersection of crossroads, in telephone pole; railroad spike, marked "U. S. 467.9 B. M."	468.12
T. 17 S., R. 26 E., near center of sec. 14, 30 feet west by 30 feet south of intersection of crossroads, 18 feet east by 90 feet north of Roger's store; iron post stamped "19 M 1923"	481.717
Reference mark, 60 feet east by 60 feet north of P. B. M., on top of concrete box around water-line valve; chiseled square	484.17
T. 17 S., R. 26 E., near center of sec. 11, 50 feet east by 72 feet north of T fence west, on east side of road, in telephone pole; railroad spike, marked "U. S. 486.8 B. M."	487.00
T. 17 S., R. 26 E., at quarter corner of secs. 11 and 12, 30 feet north by 63 feet west of junction with T road north, concrete culvert, on top of north end; chiseled square, marked "U. S. 509.3 B. M."	509.49
Reference mark, 54 feet west by 12 feet north of P. B. M., concrete culvert, on top of north end; chiseled square	451.95
From center of sec. 14, T. 17 S., R. 26 E., southeast to Lemoncove	
T. 17 S., R. 26 E., at quarter corner of secs. 13 and 14, 35 feet west by 10 feet north of crossroads, concrete culvert, on north head wall; chiseled square, marked "U. S. 476.1 B. M."	476.38
T. 17 S., R. 26 E., near corner of secs. 13, 14, 23, and 24, 42 feet east by 115 feet north of junction of road and Visalia Electric Ry. in telephone pole; railroad spike, marked "U. S. 470.9 B. M."	471.13
T. 17 S., R. 26 E., SE. ¼ sec. 24, 550 feet northwest of house, on southeast end of concrete culvert; chiseled square, marked "U. S. 453.0 B. M."	453.265
Reference mark, 80 feet north by 135 feet west of P. B. M., on northeast corner of concrete culvert; chiseled square	452.56
T. 17 S., Rs. 26 and 27 E., at corner of secs. 24, 25, 19, and 30, 40 feet west by 20 feet south of road junction; iron post stamped "30 M 1923 P. T. 60 S."	453.330
T. 17 S., Rs. 26 and 27 E., Woodlake, near corner of secs. 25, 30, 31, and 36, 30 feet west by 180 feet north of crossroads; on west curb of highway; chiseled square, marked "U. S. 439 O. B. M."	439.27
T. 17 S., R. 27 E., near corner of secs. 29, 30, 31, and 32, 100 feet east by 20 feet south of crossroads, in telephone pole; railroad spike, marked "U. S. 451.4 B. M."	451.62
T. 17 S., R. 27 E., at corner of secs. 28, 29, 32, and 33, at right angle in highway; iron post stamped "P. T. 61 S"	508.654
Reference mark, 30 feet east by 40 feet south of P. B. M., in telephone pole; railroad spike	509.02

	Feet
T. 17 S., R. 27 E., at quarter corner of secs. 32 and 33, 25 feet west by 25 feet north of intersection of crossroads, in telephone pole; railroad spike, marked "U. S. 465.5 B. M."	465.72
T. 17 S., R. 27 E., SE. ¼ sec. 33, south slope of hill, on north end of concrete culvert; chiseled square, marked "U. S. 506.9 B. M."	507.13
T. 17 S., R. 27 E., SW. ¼ sec. 34, 350 feet southeast of house, south side of highway, on south end of concrete culvert; chiseled square, marked "U. S. 531.2 B. M."	531.43
Reference mark, 12 feet south by 75 feet west of P. B. M., on south end of concrete culvert; chiseled square	478.28
Tps. 17 and 18 S., R. 27 E., near quarter corner of secs. 3 and 34, 320 feet east of H. O. Ragel's house; iron post stamped "P. T. 625 1923"	478.682
T. 17 S., R. 27 E., SE. ¼ sec. 34, on south side at west end of concrete bridge over Kaweah River; chiseled square, marked "U. S. 483.9 B. M."	484.189
T. 18 S., R. 27 E., NW. ¼ sec. 2, on east side of road, 340 feet south of Union Oil storage plant, in telephone pole; railroad spike, marked "U. S. 502.2 B. M."	502.44
Lemoncove, T. 18 S., R. 27 E., SW. ¼ sec. 2, in northeast corner of school yard; iron post stamped "P. T. 625 1923"	507.721
Lemoncove School, 2 feet east of midway between north and south entrances; iron post stamped "510 G"	511.753

NOTE.—This post shows evidence of having been moved. It does not answer Bulletin 342 description, and level circuit closure shows it to be out. A new post was set to replace it.

From Lemoncove north to sec. 10, T. 17 S., R. 27 E. (leveled twice)

	Feet
T. 17 S., R. 27 E., SE. ¼ sec. 34, on south side at west end of concrete bridge over Kaweah River; chiseled square, marked "U. S. 483.9 B. M."	484.189
T. 17 S., R. 27 E., SW. ¼ sec. 26, 700 feet south of T road to ranch house, on east side of road, 12 feet north of granite boulder about 8 by 8 by 2 feet, on granite boulder in place about 2 by 2 by 1 foot; chiseled square, marked "U. S. 532.5 B. M."	532.89
T. 17 S., R. 27 E., NE. ¼ sec. 27, on west side of road, 10 feet south of section fence west; iron post stamped "P. T. 65 S"	554.417
T. 17 S., R. 27 E., NE. ¼ sec. 22, about 125 feet east of road, in root of large oak tree; copper nail and washer, marked "U. S. 546.0 B. M."	546.43
T. 17 S., R. 27 E., SE. ¼ sec. 15, 210 feet south of Leonard Bequette's house, at southeast corner of garden; in corner fence post; railroad spike, marked "U. S. 556.9 B. M."	557.36
T. 17 S., R. 27 E., about 60 feet east of road, about 50 feet north of group of granite boulders, on large round-topped granite boulder; chiseled square, marked "U. S. 585.6 B. M."	586.06
Reference mark, about 25 feet northwest of P. B. M., on top of granite boulder; chiseled square	631.93
T. 17 S., R. 27 E., sec. 10, at northwest corner of slaughterhouse corral of Leonard Bequette; iron post stamped "P. T. 66 S"	630.793

LEMOORE QUADRANGLE

[Latitude 36° 15′–36° 22′ 30″; longitude 119° 45′–119° 52′ 30″]

KINGS COUNTY

Primary leveling by H. S. Senseney in 1923

Along south border of quadrangle

	Feet
T. 19 S., R. 20 E., corner of secs. 23, 24, 25, and 26, at southwest corner of crossroads, in fence post; railroad spike, marked "U. S. B. M. 219.7"	220.62
T. 19 S., R. 20 E., corner of secs. 22, 23, 26, and 27, at intersection of crossroads, in center of highway; iron plug, marked "U. S. B. M. 218.1"	219.00
T. 19 S., R. 20 E., 50 feet west by 25 feet south of T road north, at center of secs. 21, 22, 27, and 28; iron post stamped "13 S 1923"	216.691
Reference mark, 90 feet northeast of post, in 4 by 4 inch post; copper nail and washer	218.70
T. 19 S., R. 20 E., 30 feet east of corner of secs. 20, 21, 28, and 29, 95 feet east of T road south, south side of road, on concrete culvert; chiseled square, marked "U. S. B. M. 209.2"	210.14
T. 19 S., R. 20 E., 90 feet east of T road south, corner of secs. 19, 20, 29, and 30, north side of road, on concrete culvert; chiseled square, marked "U. S. B. M. 206.7"	207.61
T. 19 S., R. 19 E., SE. ¼ sec. 24, in northwest corner of the more easterly of two concrete bridges over Kings River; chiseled square, marked "U. S. B. M. 212.8" (no water under bridge)	213.77
T. 19 S., R. 19 E., 60 feet north of corner of secs. 23, 24, 25, and 26, on west side of fence; iron post stamped "14 S 1923"	213.637
Reference mark, 30 feet south of post; top of concrete post	213.68

In northwest corner of quadrangle

T. 18 S., Rs. 19 and 20 E., at quarter corner between secs. 13 and 18, at northwest corner of crossroads, in root of tree; copper nail and washer, marked "U. S. B. M. 217.5"	218.10
T. 18 S., R. 19 E., at quarter corner between secs. 13 and 14, 6 feet north of northeast corner of crossroads, in 4 by 4 inch post; copper nail and washer, marked "U. S. B. M. 217.7"	218.31
T. 18 S., R. 19 E., at corner of secs. 13, 14, 23, and 24, 40 feet south of southeast corner of crossroads, in root of tree; copper nail and washer, marked "U. S. B. M. 211.4"	212.03
T. 18 S., R. 19 E., at corner of secs. 23, 24, 25, and 26, 35 feet north by 30 feet east of crossroads; at iron post stamped "18 S. 1923"	214.831
Reference mark, 12 feet south of post, in root of tree; copper nail and washer	214.82

Primary leveling by R. B. Steele in 1923

From northeast corner of quadrangle west about 3 miles, thence north into Riverdale quadrangle

T. 18 S., R. 20 E., in southeast corner of sec. 11, 20 feet west by 10 feet north of west end of main gate to Floribel ranch, in root of 8-inch eucalyptus tree; copper nail and washer, painted "U. S. 235.8 B. M."	236.35

	Feet
T. 18 S., R. 20 E., in southwest corner of sec. 11, in northwest angle of right angle in road, at west end of gate in fence line east, on west edge of levee; iron post stamped "Prim. Trav. Sta. No. 4 R. S. 1923," painted "U. S. 236.2 P. B. M."	236.741
T. 18 S., R. 20 E., in northeast corner of sec. 22, in southwest angle of T road west, in base of corner fence post; railroad spike, painted "U. S. 231.1 B. M."	231.67
Center of bridge over slough, painted "231.0"	231.5
T. 18 S., R. 20 E., in northwest corner of sec. 22, 120 feet southeast of where road turns west and south, in root on west side of 48-inch oak tree; copper nail and washer, fence corner guy post 120 feet northwest painted "U. S. 228.5 B. M."	229.05
T road and highway, 0.5 mile south of Kings River, painted "225.7"	226
T. 18 S., R. 20 E., near center of sec. 16, 50 feet north of T road west, concrete culvert, center of top of east head wall; chiseled square, painted "U. S. 232.8 B. M."	233.33
T road west, junction with, painted "228.8"	229

MALAGA QUADRANGLE

[Latitude 36° 37′ 30″–36° 45′; longitude 119° 37′ 30″–119° 45′]

FRESNO COUNTY

Primary leveling by L. D. Ryus in 1901

From Fresno east along Southern Pacific R. R., Clovis branch, to Las Palmas, thence north into Clovis quadrangle

	Feet
Barton, 1.2 miles east of, in southwest corner of vineyard, north of schoolhouse, east of wagon road, 20 feet north of track; iron post stamped "317"	317.106

From Fresno quadrangle east along stage road in north part of Malaga quadrangle into Sanger quadrangle (leveled twice and partly three times; by L. D. Ryus in 1902, by Fresno County engineer from Fresno 12 miles east, and from Navin east across quadrangle by L. F. Biggs in 1919)

Navin, 50 feet southwest of railroad crossing, in telephone pole scribed "U. S. 322"; spike	322.94
Fresno, 3 miles east of station, 400 feet west of crossing of Sunnyside car line and Ventura Ave., at south edge of road; iron post	305.335
Fresno, 5 miles east of, 50 feet northeast of crossroads, at corner of Sunnyside grocery, in telephone pole painted "U. S. 318"; spike	318.50
Fresno, 6 miles east of, 50 feet northwest of Fresno-Centerville and Fowler-Clovis crossroads; iron post stamped "323 B"	323.565
Fresno, 7 miles east of, 40 feet northeast of crossroads, in base of telephone pole painted "U. S. 332"	332.33
Fresno, 8 miles east of, south of Centerville road, 60 feet southeast of crossroads, in base of telephone pole painted "U. S. 336"; spike	336.16
Fresno, 9 miles east of, on south edge of Centerville road, 40 feet east of section line, at road crossing, opposite square yellow house; iron post	348.185

MALAGA, CONEJO, AND SELMA QUADRANGLES

[Latitude 36° 30′–36° 45′; longitude 119° 30′–119° 45′]

FRESNO AND TULARE COUNTIES

Precise leveling by C. H. Semper in 1901–2

From Malaga southeast along Southern Pacific R. R. to Kingsburg

	Feet
Malaga, in front of station; top of rail	293.7
Malaga, 0.4 mile south of, 15 feet south of milepost 211, west side of track, at margin of highway; iron post stamped "297 B"	297.531
Malaga, 3.5 miles south of, 10 feet south of milepost 214, east side of track, at margin of highway; iron post stamped "300 B"	300.961
Fowler, in front of station; top of rail	304.6
Fowler, 1.7 miles south of, 12 feet south of milepost 217, west side of track, at margin of highway; iron post stamped "304 B"	304.367
Selma, 0.8 mile north of, 11 feet south of milepost 220, west side of track, at margin of highway; iron post stamped "310 B"	310.865
Selma, in front of station; top of rail	306.3
Selma, 2.2 miles south of, 8 feet south of milepost 223, west side of track, at margin of highway; iron post stamped "305 B"	305.248
Kingsburg, in front of station; top of rail	297.1
Kingsburg, 0.3 mile south of, opposite milepost 226, west side of track, at margin of highway; iron post stamped "295 B"	295.244
Kingsburg, 3 miles south of, 8 feet south of milepost 229, west side of track, at margin of highway; iron post stamped "295 B"	295.606

MONSON QUADRANGLE

[Latitude 36° 22′ 30″–36° 30′; longitude 119° 15′–119° 22′ 30″]

TULARE COUNTY

Primary leveling by F. R. Swearingen in 1923

Along east border of quadrangle

	Feet
T. 18 S., R. 25 E., at quarter corner of secs. 3 and 10, 35 feet south by 10 feet east of junction with T road south; iron post stamped "7 M 1923"	344.448
Reference mark, 70 feet north by 50 feet west of P. B. M., in telephone pole; spike	344.949
Tps. 17 and 18 S., R. 25 E., at corner of secs. 33, 34, 3, and 4, 30 feet north by 30 feet west of intersection of crossroads, in corner fence post; railroad spike, marked "U. S. 339.3 B. M."	339.65
T. 17 S., R. 25 E., at corner of secs. 27, 28, 33, and 34, 32 feet south by 25 feet east of junction with T road east, in telephone pole; railroad spike, marked "U. S. 339.0 B. M."	339.32
T. 17 S., R. 25 E., at corner of secs. 21, 22, 27, and 28, at Taurusa School, 30 feet east by 20 feet south of intersection of crossroads; iron post stamped "11 M 1923"	339.930
Reference mark, 54 feet west by 15 feet south of P. B. M., in telephone pole; railroad spike	339.97
T. 17 S., R. 25 E., at corner of secs. 15, 16, 21, and 22, 4 feet south of corner of T fence east, in telephone pole; railroad spike, marked "U. S. 335.0 B. M."	335.312
T. 17 S., R. 25 E., at corner of secs. 9, 10, 15, and 16, in right angle of power line south and east, in corner power pole; railroad spike, marked "U. S. 334.1 B. M."	334.41

	Feet
T. 17 S., R. 25 E., at corner of secs. 3, 4, 9, and 10, 1 mile south of Yettem, 6 feet north of corner of T fence east; iron post stamped "12 M 1923"	333.578
Reference mark, 36 feet north of P. B. M., in telephone pole; railroad spike	332.07
Along south border of quadrangle	
T. 18 S., R. 25 E., at quarter corner of secs. 4 and 9, in corner post of T fence north, at southwest corner of small corral; railroad spike, marked "U. S. 335.2 B. M."	335.55
T. 18 S., R. 25 E., near quarter corner of secs. 5 and 8, 10 feet east by 12 feet north of intersection of road and Atchison, Topeka & Santa Fe Ry. track, in crossing signpost; railroad spike, marked "U. S. 331.3 B. M."	331.69
Reference mark, 72 feet east by 30 feet south of P. B. M., concrete culvert, on top of north end of head wall; chiseled square	326.42
T. 18 S., R. 25 E., at corner of secs. 5, 6, 7, and 8, 60 feet west by 5 feet south of intersection of crossroads; iron post stamped "8 M 1923," telephone pole marked "U. S. 323.8 B. M."	324.198
T. 18 S., Rs. 24 and 25 E., at corner of secs. 1, 6, 7, and 12, in corner post of T fence south; railroad spike, marked "U. S. 319.2 B. M."	319.55
T. 18 S., R. 24 E., at corner of secs. 1, 2, 11, and 12, on east side of road, in telephone pole; railroad spike, marked "U. S. 319.2 B. M."	313.29
Along west border of quadrangle	
T. 18 S., R. 24 E., at corner of secs. 3, 4, 9, and 10, in fence post at end of road north; railroad spike, marked "U. S. 302.6 B. M."	303.00
Tps. 17 and 18 S., R. 24 E., near corner of secs. 3, 4, 33, and 34, on south side of St. Johns River, in root on south side of 24-inch willow tree; copper nail and washer, marked "U. S. 299.6 B. M."	299.97
Reference mark, 60 feet west of P. B. M. (no description)	296.70
T. 17 S., R. 24 E., near corner of secs. 27, 28, 33, and 34, 0.4 mile west of tenant house on Herrall ranch, 153 feet west of angle in fence line; iron post, stamped "13 M 1923"	296.008
T. 17 S., R. 24 E., near corner of secs. 21, 22, 27, and 28, about 1,200 feet west of poplar tree and small pump house, in fence post; railroad spike, marked "U. S. 295.9 B. M."	296.20
T. 17 S., R. 24 E., near corner of secs. 15, 16, 21, and 22, about 300 feet east of clump of cedar hedge, on south side of road, in fence post; railroad spike, marked "U. S. 296.4 B. M."	296.76
Reference mark, 40 feet west by 40 feet south of P. B. M., in fence post; spike	297.82
T. 17 S., R. 24 E., near corner of secs. 9, 10, 15, and 16, 36 feet east of T fence north; iron post stamped "14 M 1923"	297.891
T. 17 S., R. 24 E., at corner of secs. 3, 4, 9, and 10, in corner post of T fence north; marked "U. S. 303.2 B. M."	303.54
Reference mark, 132 feet south by 20 feet west of P. B. M.; top of southeast corner of concrete weir	311.07
T. 17 S., R. 24 E., at north corner of secs. 3 and 4, 42 feet east by 20 feet south of private T road south to Schwabe ranch house; iron post stamped "15 M 1923"	311.348

NO. 30 QUADRANGLE

[Latitude 36° 22′ 30″–36° 30′; longitude 119° 30′–119° 37′ 30″]

FRESNO, KINGS, AND TULARE COUNTIES

Precise leveling by C. H. Semper in 1901

From Selma quadrangle southeast along Southern Pacific R. R. across northeast part of No. 30 quadrangle into Traver quadrangle

	Feet
Kingsburg, in front of station; top of rail	297.1
Kingsburg, 0.3 mile south of, opposite milepost 226, west side of track, at edge of highway; iron post stamped "295 B"	295.244
Kingsburg, 3 miles south of, 8 feet south of milepost 229, west side of track, at edge of highway; iron post stamped "295 B"	295.606

Primary leveling by L. F. Biggs in 1919

From Laton quadrangle east along highways near north border of No. 30 quadrangle to Southern Pacific R. R., thence southeast to point 3 miles southeast of Kingsburg

T. 16 S., Rs. 21 and 22 E., 40 feet southwest of T road north, at south corner of secs. 36 and 31, in concrete post; bronze tablet (?) stamped "271 B B 1919 71"	271.591
T. 16 S., R. 21 E., northeast corner of sec. 36, 30 feet southwest of crossroads, in corner fence post, painted "U. S. 278"; spike	278.03
Kingsburg, 3 miles west by 0.5 mile south of, at crossroads, in base of power pole painted "U. S. 281"; spike	281.62
Kingsburg, 2 miles west by 0.5 mile south of, 50 feet northwest of crossroads, in corner fence post painted "290"; spike	290.74
Kingsburg, 1 mile west by 0.5 mile south of, 40 feet southwest of crossroads, in concrete post; bronze tablet stamped "294 B B 1919 85"	294.572
Kingsburg, 0.5 mile south of, at southeast corner of Kingsburg cemetery, top of south iron hitching post; bronze tablet (?) stamped "x 294"	294.56
Kingsburg, 0.5 mile southeast of, west side of railroad, east edge of highway, on Fresno-Tulare county line, in concrete post; bronze tablet stamped "1919 B B 86 293"	293.363
Kingsburg, 1.3 miles southeast of, on north end of concrete highway bridge; chiseled square, marked "U. S. 296"	296.42
Kingsburg, 1.8 miles southeast of, northeast corner of concrete bridge over Kings River, top of railing; chiseled square, marked "U. S. 298"	298.02
Kingsburg, 3 miles southeast of, north end of concrete highway culvert; chiseled square, marked "U. S. 298"	298.32
Kingsburg, 3.5 miles southeast of, 8 feet south of milepost 229, west side of track, at edge of highway; iron post stamped "295 B" (Bull. 342, p. 180)	295.606

Primary leveling by H. S. Senseney in 1923

From sec. 12, T. 18 S., R. 22 E., north to township line, thence east to Kings-Tulare county line, thence along county line to north border of quadrangle

T. 18 S., R. 22 E., at corner of secs. 1, 2, 11, and 12, at northwest corner of T road west, in fence post; railroad spike, marked "U. S. B. M. 260.5"	261.08

	Feet
Tps. 17 and 18 S., R. 22 E., at corner of secs. 1, 2, 35, and 36, 80 feet east of T road south, on south side of road, in telephone pole; railroad spike, marked "U. S. B. M. 265.2"	265.77
Tps. 17 and 18 S., Rs. 22 and 23 E., 30 feet west by 25 feet south of common corner of; iron post stamped "15 S 1923"	266.260
Reference mark, 120 feet west of post, in telephone pole; spike	267.49
T. 17 S., Rs. 22 and 23 E., 15 feet south of corner of secs. 25, 30, 31, and 36, on east side of road, in fence post; spike marked "U. S. B. M. 271.7"	272.25
T. 17 S., Rs. 22 and 23 E., at corner of secs. 19, 24, 25, and 30, at southwest corner of crossroads, in fence post; railroad spike, marked "U. S. B. M. 276.9"	277.52
T. 17 S., Rs. 22 and 23 E., at corner of secs. 13, 18, 19, and 24, 20 feet north by 30 feet east of T road east; iron post stamped "16 S 1923"	281.342
Reference mark, 15 feet west of post, in fence post; railroad spike	281.41
T. 17 S., Rs. 22 and 23 E., at corner of secs. 7, 12, 13, and 18, 90 feet south of T road east, on east side of road, in telephone pole; railroad spike, marked "U. S. B. M. 285.8"	286.41
T. 17 S., Rs. 22 and 23 E., at corner of secs. 1, 6, 7, and 12, at southeast corner of T road east, in telephone pole; railroad spike, marked "U. S. B. M. 287.6"	288.20
Tps. 16 and 17 S., Rs. 22 and 23 E., 15 feet north of common corner; iron post stamped "17 S 1923"	289.064
Reference mark, 12 feet west of post, in fence post; railroad spike	288.32

NO. 33 QUADRANGLE

[Latitude 36° 15′–36° 22′ 30″; longitude 119° 52′ 30″–120°]

FRESNO AND KINGS COUNTIES

Primary leveling by H. S. Senseney in 1923

From southeast corner of quadrangle west and north to Lethent

	Feet
T. 19 S., R. 19 E., at corner of secs. 22, 23, 26, and 27, on north side of road; top of concrete post marked "210+70," elevation marked "U. S. B. M. 220.2"	221.13
Lethent, 60 feet northwest of barn (Bull. 342, p. 108)	219.635

Along south and west borders of quadrangle

T. 19 S., R. 19 E., corner of secs. 22, 23, 26, and 27 (Bull. 342, p. 12)	221.126
T. 19 S., R. 19 E., corner of secs. 21, 22, 27, and 28, on side of road; top of concrete post, marked "U. S. B. M. 229.4"	230.35
T. 19 S., R. 19 E., corner of secs. 20, 21, 28, and 29, on side of road; top of concrete post, not marked (Highway station 105+41)	238.68
T. 19 S., R. 19 E., corner of secs. 19, 20, 29, and 30, 30 feet south by 8 feet west of; iron post stamped "20 S 1923"	245.001
Reference mark, 8.4 feet east of post; top of concrete post	244.797
T. 19 S., Rs. 18 and 19 E., corner of secs. 19, 24, 25, and 30, on side of road on Fresno-Kings county line; top of concrete post, marked "U. S. B. M. 252.9"	253.797
T. 19 S., R. 18 E., corner of secs. 23, 24, 25, and 26, at northwest corner of crossroads; top of concrete post, marked "U. S. B. M. 261.7"	262.66

	Feet
T. 19 S., R. 18 E., corner of secs. 22, 23, 26, and 27, 30 feet north by 25 feet west of crossroads; iron post stamped "21 S 1923"	273.525
Reference mark, 6.5 feet east of post; top of concrete post	273.65
T. 19 S., R. 18 E., corner of secs. 14, 15, 22, and 23, at southwest corner of T road west, in telegraph pole; railroad spike, marked "U. S. B. M. 268.6"	269.58
T. 19 S., R. 18 E., corner of secs. 10, 11, 14, and 15, at southwest corner of crossroads, in telegraph pole; railroad spike, marked "U. S. B. M. 266.0"	266.92
T. 19 S., R. 18 E., 5 feet south by 20 feet east of corner of secs. 2, 3, 10, and 11; iron post stamped "22 S. 1923"	263.011
Reference mark, 8.5 feet north of post, on west side of concrete head gate; chiseled square	263.77
Tps. 18 and 19 S., R. 18 E., corner of secs. 2, 3, 34, and 35, at southeast corner of T road south, in stake; copper rail and washer, marked "U. S. B. M. 257.9"	258.81
Tps. 18 and 19 S., R. 18 E., corner of secs. 1, 2, 35, and 36, on east side of road at T road west, in wooden post; railroad spike marked "U. S. B. M. 248.4"	249.32
T. 18 S., R. 18 E., 9.2 feet south of corner of secs. 25, 26, 35, and 36, on west side of fence; iron post stamped "23 S. 1923"	246.844
Reference mark, 9.2 feet north of post; top of iron section-corner post	247.644
T. 18 S., R. 18 E., corner of secs. 23, 24, 25, and 26, at junction with T road east; top of iron corner post (not marked)	241.055
T. 18 S., R. 18 E., corner of secs. 13, 14, 23, and 24, on west side of road, in fence post; railroad spike, marked "U. S. B. M. 230.2"	231.09
T. 18 S., R. 18 E., 25 feet north by 25 feet east of corner of secs. 11, 12, 13, and 14, 10 feet north of fence corner; iron post stamped "24 S 1923" (no reference mark)	224.259

From sec. 23, T. 18 S., R. 19 E., south to Lethent

T. 18 S., R. 19 E., corner of secs. 22, 23, 26, and 27, at northwest corner of crossroads, in fence post; railroad spike, marked "U. S. B. M. 210.0"	210.75
T. 18 S., R. 19 E., corner of secs. 26, 27, 34, and 35, at southeast corner of T road east, in fence post; railroad spike, marked "U. S. B. M. 209.3"	210.04
Tps. 18 and 19 S., R. 19 E., corner of secs. 2, 3, 34, and 35, 40 feet north by 25 feet west of; iron post stamped "19 S. 1923"	211.232
Reference mark, 70 feet south of post, in corner fence post; railroad spike	211.00
T. 19 S., R. 19 E., corner of secs. 2, 3, 10, and 11, in corner post; copper nail and washer, marked "U. S. B. M. 212.9"	213.73
Lethent, 60 feet northwest of barn, south of track, 2.5 feet east of telegraph milepole 267; iron post stamped "219 G"	219.635

NO. 34 QUADRANGLE

[Latitude 36° 15′–36° 22′ 30″; longitude 119° 30′–119° 37′ 30″]

KINGS AND TULARE COUNTIES

Primary leveling by H. S. Senseney in 1923

Along south border of quadrangle from Hanford quadrangle into Goshen quadrangle

	Feet
T. 19 S., R. 22 E., corner of secs. 19, 20, 29, and 30, at southwest corner of crossroads, in telephone pole; railroad spike marked "U. S. B. M. 228.6"	229.55
T. 19 S., R. 22 E., corner of secs. 20, 21, 28, and 29, at southeast corner of crossroads, in telephone pole; railroad spike marked "U. S. B. M. 231.5"	232.46
T. 19 S., R. 22 E., corner of secs. 21, 22, 27, and 28, 30 feet north by 65 feet east of crossroads; iron post stamped "7 S 1923"	232.161
Reference mark, 20 feet west of post, in telephone pole; railroad spike	232.77
T. 19 S., R. 22 E., secs. 22, 23, 26, and 27, about 0.1 mile west of corner of, on south side of road, in telephone pole; railroad spike marked "U. S. B. M. 235.6"	236.55
T. 19 S., R. 22 E., corner of secs. 23, 24, 25, and 26, at northwest corner of crossroads, in telephone pole; railroad spike marked "U. S. B. M. 236.1"	236.98
T. 19 S., Rs. 22 and 23 E., corner of secs. 19, 24, 25, and 30, 25 feet south by 30 feet east of junction with T road east; iron post stamped "8 S 1923"	243.715
Reference mark, 45 feet north of post, in telephone pole; railroad spike	243.73
T. 19 S., R. 23 E., corner of secs. 19, 20, 29, and 30, at northwest corner of crossroads, in telephone pole; railroad spike, marked "U. S. B. M. 246.6"	247.53

Primary leveling by R. B. Steele in 1923

Along north border of quadrangle from Goshen quadrangle into Hanford quadrangle

T. 18 S., R. 23 E., secs. 7, 8, 17, and 18, 1,000 feet west by 450 feet south of corner of, at west end of footbridge over Cross Creek, in base of willow tree; railroad spike, bridge painted "U. S. 257.2 B. M"	257.75
Reference mark, 50 feet north of P. B. M., in base of power pole; railroad spike	258.53
T. 18 S., Rs. 22 and 23 E., 60 feet south of corner of secs. 7, 12, 13, and 18, at north end of gate in fence line south; iron post stamped "R. S. 1923," gatepost painted "U. S. 258.2 P. B. M"	258.755
Center of bridge over Settlers Canal, painted "260.7"	261
T. 18 S., R. 22 E., in southeast corner of sec. 11, in northwest angle of crossroads, in base of power pole; railroad spike painted "U. S. 257.1 B. M"	257.663
Center of bridge over canal, painted "264.2"	265
T. 18 S., R. 22 E., in northwest corner of sec. 14, in southeast angle of crossroads, in base of telephone pole; railroad spike painted "U. S. 262.8 B. M"	262.37

	Feet
T. 18 S., R. 22 E., in northeast corner of sec. 16, in southwest angle of crossroads; iron post stamped "R. S. 1923," painted "U. S. 260.6 P. B. M"	261.127
Reference mark, 60 feet east of P. B. M., in base of eucalyptus tree: railroad spike	261.29
Center of bridge over canal, painted "262.2"	263
T. 18 S., R. 22 E., in southeast corner of sec. 8, 50 feet west of fence line north, on north side of road, in base of power pole; railroad spike, pole painted "U. S. 257.9 B. M."	258.48
T. 18 S., R. 22 E., quarter corner on north side of sec. 17; center of road at T road north	256
T. 18 S., R. 22 E., in southeast corner of sec. 7, 130 feet west of approximate corner, in base of transformer pole; railroad spike, painted "U. S. 265.5 B. M."	257.01

NO. 35 QUADRANGLE

[Latitude 36° 15′–36° 22′ 30″; longitude 119°–119° 07′ 30″]

TULARE COUNTY

Primary leveling by F. R. Swearingen in 1923

From sec. 8, T. 18 S., R. 27 E., south via Hamilton's ranch to Yokohl School

	Feet
T. 18 S., R. 27 E., at corner of secs. 8, 9, 16, and 17, 20 feet west by 20 feet south of intersection of crossroads, in telephone pole; railroad spike, marked "U. S. 449.8 B. M."	450.11
Reference mark, 30 feet east by 180 feet south of P. B. M., in telephone pole; railroad spike	458.82
Lind Cove, T. 18 S., R. 27 E., corner of secs. 16, 17, 20, and 21, 200 feet east by 500 feet south of school, at curve in highway at T road west, on edge of railroad right of way; iron post, stamped "25 M 1923"	460.164
T. 18 S., R. 27 E., near corner of secs. 20, 21, 28, and 29, 800 feet northeast of Hester car stop, Visalia Electric R. R., in power pole; railroad spike, marked "U. S. 462.5 B. M."	462.76
T. 18 S., R. 27 E., SW. ¼ sec. 29, at stock-loading pens, between side and main tracks, in power pole; railroad spike, marked "U. S. 464.0 B. M."	464.21
Reference mark, 120 feet southeast of P. B. M., in telephone pole; railroad spike	464.88
T. 18 S., R. 27 E., 0.25 mile east of corner of secs. 29, 30, 31, and 32, 100 feet north of T road east; iron post, stamped "26 M 1923"	464.815
T. 18 S., R. 27 E., SE. ¼ sec. 32, 1,100 feet southeast of James Hamilton's ranch house, on east side of road, in telephone pole; railroad spike, marked "U. S. 481.3 B. M."	481.47
T. 19 S., R. 27 E., SE. ¼ sec. 5, 1.21 miles south of James Hamilton's ranch house, in northwest angle of road junction, near corner of fence; iron post stamped "499 G" (From Bull. 342, p. 105)	499.626
T. 19 S., R. 27 E., 0.25 mile south of quarter corner of secs. 8 and 9, at T road north, in telephone pole; railroad spike, marked "U. S. 518.4 B. M."	518.924
T. 19 S., R. 27 E., NE. ¼ sec. 16, 50 feet north of 36-inch oak tree, on top at northeast end of concrete culvert; chiseled square, marked "U. S. 541.0 B. M."	541.527

	Feet
Reference mark, 54 feet west of P. B. M.	568.17
T. 19 S., R. 27 E., near quarter corner of secs. 15 and 22, 0.5 mile west of Gill's ranch house, at corner of T fence north; iron post stamped "27 M 1923"	568.584
T. 19 S., R. 27 E., near corner of secs. 14, 15, 22, and 23, 30 feet east by 50 feet north of T fence south, 400 feet northwest of house, in telephone pole; railroad spike, marked "U. S. 617.2 B. M."	617.80
T. 19 S., R. 27 E., sec. 24, 70 feet southwest of Yokohl School, 20 feet north of road, in embedded granite boulders 36 by 72 inches and 12 inches high; bronze tablet stamped "636 G"	636.518

From sec. 14, T. 18 S., R. 26 E., south along west border of quadrangle

T. 18 S., R. 26 E., near quarter corner of secs. 14 and 15, in northwest corner of north end of railroad bridge 34 B; copper nail and washer, marked "U. S. 404.3 B. M."	404.48
T. 18 S, R. 26 E., near quarter corner of secs. 22 and 23, 850 feet south of bridge over Kaweah River, on east side of road, in telephone pole; railroad spike, marked "U. S. 397.9 B. M."	398.04
T. 18 S., R. 26 E., at quarter corner of secs. 26 and 27, 20 feet north by 20 feet east of intersection of crossroads; iron post stamped "28 M 1923"	405.192
Reference mark, 40 feet west by 40 feet south of P. B. M., in telephone pole; railroad spike	404.72
T. 18 S., R. 26 E., corner of secs. 26, 27, 34, and 35, 30 feet north by 25 feet east of intersection of crossroads, 75 feet north of Southern California Edison Co.'s telephone pole; railroad spike, marked "U. S. 401.9 B. M."	402.003
Tps. 18 and 19 S., R. 26 E., at corner of secs. 34 and 35, 2, and 3, 20 feet north by 30 feet east of intersection of crossroads, in telephone pole; railroad spike, marked "U. S. 399.0 B. M."	399.13
T. 19 S., R. 26 E., near corner of secs. 2, 3, 10, and 11, northwest angle of junction of Kaweah Ave. and Pine St., in front of Union High School; on curb, chiseled square, marked "U. S. 392.0 B. M."	392.18
Exeter, at northwest corner of Kaweah and Pine streets, opposite Union High School, between two telephone poles, between curb and sidewalk, flush with surface of ground; iron post stamped "P. T. 56 S 1923"	392.096
Exeter School, north of steps at northwest entrance, in west face of granite baluster, 24 inches above ground; aluminum tablet stamped "391 G" (Bull. 342, p. 105)	391.025
T. 19 S., R. 26 E., corner of secs. 10, 11, 14, and 15, at intersection of T road west, in center of highway; iron plug, marked "U. S. 379.1 B. M."	379.20
T. 19 S., R. 26 E., at quarter corner of secs. 14 and 15, in center of highway; iron plug marked "U. S. 372.4 B. M."	372.52
T. 19 S., R. 26 E., at quarter corner of secs. 22 and 23, on west side of road, in line with T road east, in telephone pole; railroad spike, marked "U. S. 358.8 B. M."	359.00
Reference mark, 60 feet east of P. B. M., in telephone pole; railroad spike	350.88
T. 19 S., R. 26 E., corner of secs. 22, 23, 26, and 27, 25 feet south by 35 feet west of crossroads; iron post stamped "29 S 1923"	352.469

From sec. 14, T. 19 S., R. 26 E., east and north to sec. 9, T. 19 S., R. 27 E.

	Feet
T. 19 S., R. 26 E., at quarter corner of secs. 14 and 15, in center of highway; iron plug marked "U. S. 372.4 B. M."	372.52
T. 19 S., R. 26 E., at quarter corner of secs. 13 and 14, 24 feet east by 30 feet south of intersection of crossroads, in telephone pole; railroad spike, marked "U. S. 378.1 B. M."	378.25
T. 19 S., Rs. 26 and 27 E., near quarter corner of secs. 13 and 18, 168 feet east of T fence north, on top of north end of concrete culvert; chiseled square, marked "U. S. 459.6 B. M."	459.73
T. 19 S., R. 27 E., near quarter corner of secs. 17 and 18, 0.4 mile south of Rocky Hill, at summit of saddle over ridge, north side of road; iron post stamped "29 M 1923"	712.404
Reference mark, 140 feet east of P. B. M., in fence post; railroad spike	703.658
T. 19 S., R. 27 E., 0.25 mile south of quarter corner of secs. 8 and 9, at T road north, in telephone pole; railroad spike, marked "U. S. 518.4 B. M."	518.92

ORANGEDALE SCHOOL QUADRANGLE

[Latitude 36° 45′–36° 52′ 30″; longitude 119° 22′ 30″–119° 30′]

FRESNO COUNTY

Primary leveling by L. F. Biggs in 1919

From Centerville, Sanger quadrangle, northeast along highways to Piedra (leveled twice)

	Feet
Centerville, 1.2 miles northeast of, at road north, in corner fence post painted "U. S. 404"; spike	405.10
Centerville, 1.6 miles northeast of, in floor of canal bridge painted "U. S. 412"; spike	412.91
Centerville, 2.4 miles northeast of, at Y road west, in mail-box post painted "U. S. 421"; spike	422.15
Centerville, 3 miles northeast of; floor of canal bridge painted "U. S. 429"	430.2
Centerville, 3.6 miles northeast of, northwest of road, at southeast corner of Oakdale School yard, in concrete post; bronze tablet (?) stamped "444 1919 B B 89"	445.271
Oakdale School, 0.6 mile northeast of, in floor of canal bridge painted "U. S. 461"; spike	462.38
Oakdale School, 1.5 miles northeast of, north of road at farmhouse, in base of 100-inch oak tree scribed "U. S. 475"; spike	476.24
Oakdale School, 2.4 miles northeast of, northeast corner of windmill tower, in concrete base painted "U. S. 498"	499.01
Piedra, 2.7 miles southwest of, north of road, where telephone line crosses, in base of telephone pole painted "U. S. 509"; spike	509.65
Piedra, 1.8 miles southwest of, south of road, north of flume, 300 feet west of underflume crossing, in oak tree scribed "U. S. 515"	515.76
Piedra, 0.8 mile southwest of, west of road, in base of 60-inch oak tree scribed "U. S. 525"; spike	525.62
Piedra, 0.3 mile southwest of bridge, northwest edge of road at cliff; top of 2-inch galvanized pipe cemented in rock stamped "F 363 517.8 524"	525.266
Piedra, 300 feet east of bridge, 30 feet north of road, 40 feet south of flume, on summit of boulder; bronze tablet stamped "106 1919 B B"	537.677

RAISIN QUADRANGLE

[Latitude 36° 30′–36° 37′ 30″; longitude 119° 52′ 30″–120°]

FRESNO COUNTY

Primary leveling by L. F. Biggs in 1919

From Kearney Park quadrangle southeast along highways in northeast part of Raisin quadrangle into Caruthers quadrangle

	Feet
McMullin, 3.5 miles southeast of, 6 feet south of milepost 203, west side of railroad, in concrete post; bronze tablet stamped "229 57 119 B B"	230.185
Raisin City, 1 mile northwest of, in base of milepost 204 painted "U. S. 229"; spike	229.20
Raisin City, 500 feet southwest of depot, 50 feet southeast of crossroads, opposite C. G. Ross & Co.'s store, in concrete post; bronze tablet stamped "236 58 1919 B B"	236.155
T. 15 S., R. 19 E., southwest corner of sec. 21, 40 feet northwest of crossroads, in power pole painted "U. S. 238"; spike	238.55
T. 15 S., R. 19 E., southwest corner of sec. 23, 40 feet northeast of crossroads, in base of power pole 514 painted "U. S. 242"; spike	242.94

From Kearney Park quadrangle south along highways to Raisin

T. 15 S., R. 19 E., southwest corner of sec. 14, 40 feet northeast of crossroads, in base of power pole 499 painted "U. S. 243"; spike	243.08

REEDLEY QUADRANGLE

[Latitude 36° 30′–36° 37′ 30″; longitude 119° 22′ 30″–119° 30′]

FRESNO AND TULARE COUNTIES

Primary leveling by L. F. Biggs in 1919

From Wahtoke quadrangle south and west along highways in northwest part of Reedley quadrangle into Selma quadrangle

	Feet
Reedley, 1.5 miles north by 0.5 mile west of, 50 feet northwest of T road east, 20 feet north of power line, 20 feet north of large palm tree, in concrete post; bronze tablet (?) stamped "355 1919 B B 89"	355.398
Reedley, 0.5 mile north by 0.5 mile west of, 60 feet southeast of crossroads, east end of concrete culvert; chiseled "U. S. 349"	349.86
Reedley, 1 mile northwest of Atchison, Topeka & Santa Fe Ry. bridge over Kings River, in south end of east concrete abutment; bronze tablet stamped "92 1919 B B 350"	350.155
Southern Pacific R. R. bridge, east end of; top of rail	342.2
Reedley Bridge, 1 mile west of, 40 feet southwest of crossroads, in power pole painted "U. S. 327"; spike	327.02

From Selma quadrangle along highways east and south in southwest part of Reedley quadrangle

Kingsburg, 3 miles east of, 60 feet northwest of crossroads, in base of eucalyptus tree scribed "U. S. 307"; spike	307.08
Kingsburg, 3 miles east by 1 mile south of, 40 feet southeast of crossroads, north bank of canal, in telephone pole painted "U. S. 303"; spike	302.89

From point 3 miles east of Kingsburg east along highways near south border of quadrangle into Sultana quadrangle

	Feet
Kingsburg, 3 miles east of, 60 feet northwest of crossroads, in base of eucalyptus tree scribed "U. S. 307"; spike	307.08
Kingsburg, 3.5 miles east of, north of road, at southeast corner of Kings River School yard, in concrete post; bronze tablet stamped "1919 B B 96 309"	309.129
Kings River School, 1 mile east of, at turn north in concrete highway, 40 feet southwest of crossroads, in base of corner fence post painted "U. S. 310"; spike	310.47
Kings River School, 2 miles east of, 40 feet southwest of crossroads, in corner fence post painted "U. S. 311"; spike	311.82
Kings River School, 3 miles east of, 500 feet east of church, 40 feet northwest of crossroads, in concrete post; bronze tablet stamped "1919 B B 97 313"	313.521
Kings River School, 4 miles east of, 40 feet southwest of crossroads, in telephone pole painted "U. S. 314"; spike	314.03
Dinuba, 2 miles south by 0.5 mile west of, 50 feet northeast of crossroads, in base of large eucalyptus tree scribed "U. S. 319"; spike	319.65
Dinuba, 2 miles south by 0.5 mile east of, 40 feet southwest of crossroads, on south end of concrete culvert; chiseled square marked "U. S. 329"	329.47
Smyrna, 150 feet southeast of station, 40 feet northeast of road crossing, east edge of railroad right of way, in concrete post; bronze tablet stamped "98 1919 B B 329"	329.897

From point near Reedley east and south along highways near north and east borders of quadrangle

Reedley, 1.5 miles north by 0.5 mile west of, 50 feet northwest of T road east; iron post stamped "355 1919 BB 89"	355.398
Top of rail, at crossing A 2	355.37
Reedley, 1.5 miles north by 0.5 mile east of, north end of concrete culvert; chiseled square, marked "U. S. 364"	364.79
Reedley, 1.5 miles north by 1 mile east of, 50 feet southeast of crossroads, in base of eucalyptus tree scribed "U. S. 359"; spike	359.68
Reedley, 1.5 miles north by 2 miles east of, 50 feet northwest of crossroads, in base of telephone pole painted "U. S. 363"; spike	363.58
Reedley, 1.5 miles north by 3 miles east of, 40 feet northeast of crossroads, at southwest corner of alfalfa field, in concrete post; bronze tablet stamped "90 1919 B B 366"	366.595
Reedley, 1.5 miles north by 4 miles east of, 0.5 mile west of Mount Olive School, 50 feet northwest of cross roads, in base of power pole painted "U. S. 377"; spike	377.75
Reedley, 0.5 mile north by 4 miles east of, 40 feet west of road, at substation, in floor of canal bridge painted "U. S. 370"; spike	370.21
Reedley, 0.5 mile south by 4 miles east of, 40 feet southeast of cross roads, at northwest corner of Smith Mountain School yard, in concrete post; bronze tablet stamped "91 1919 B B 361"	361.521
Smith Mountain School, 1 mile south of, 40 feet southwest of cross roads, in west end of concrete culvert; chiseled square, marked "U. S. 352"	351.94
Giffin, 50 feet southwest of railroad crossing, in power pole painted "U. S. 344"; spike	344.22

	Feet
Dinuba, 0.5 mile east of, south edge of concrete highway, east bank of canal, 40 feet southwest of cross roads, in concrete post; bronze tablet stamped "1919 B B 92 340"	340.345
Dinuba, 0.5 mile east by 1 mile south of, 40 feet northeast of cross roads, in base of power pole painted "U. S. 334"; spike	334.09
Dinuba, 0.5 mile east by 2 miles south of, 40 feet southwest of cross roads, on south end of concrete culvert; chiseled square, marked "U. S. 329"	329.47

From Sultana quadrangle west along highways near northeast corner of Reedley quadrangle

Orange Cove, 2.6 miles west by 0.5 mile south of, opposite T road north, in base of telephone pole painted "U. S. 387"; spike	386.95

RIVERDALE QUADRANGLE

[Latitude 36° 22′ 30″–36° 30′; longitude 119° 45′–119° 52′ 30″]

FRESNO AND KINGS COUNTIES

Primary leveling by L. F. Biggs in 1919

From Burrel quadrangle east along highways near north border of Riverdale quadrangle

	Feet
T. 17 S., R. 19 E., northeast corner of sec. 2, at T fence south, in corner fence post painted "U. S. 224"; spike	225.22
T. 17 S., R. 20 E., northwest corner of sec. 6, at T road south to Riverdale; iron post stamped "U. S. E. D. 315 239.6" (U. S. E. D. elev=239.56)	236.460
T. 16 S., R. 20 E., at T road north, southwest corner of sec. 31, top of 4 by 4 inch stake, fence post painted "U. S. 234"	234.21
T. 16 S., R. 20 E., southwest corner of sec. 32, at T road north, in corner fence post painted "U. S. 230"; spike	230.84
T. 16 S., R. 20 E., southeast corner of sec. 32, at T fence north, in fence post painted "U. S. 236"; spike	236.99
T. 17 S., R. 20 E., northeast corner of sec. 4; iron post stamped "U. S. E. D. No. 314 241.4" (U. S. E. D. elev=241.37)	238.270
T. 17 S., R. 20 E., north corner of secs. 2 and 3, top of granite corner stone; chiseled square, "U S. 239" scribed on corner fence post	239.44

Primary leveling by R. B. Steele in 1923

Along south border of quadrangle

Reference mark, center of Y roads; iron stake at P. B. M	229.23
T. 18 S., R. 20 E., at center of sec. 9, northeast angle of cross-roads; iron post stamped "Prim. Trav. Sta. No. 3 R. S. 1923," painted "U. S. 227.9 B. M."	228.409
T. 18 S., R. 20 E., quarter corner between secs. 7 and 8, 0.25 mile east of, on north side of road, at fence line north, in base of corner fence post; railroad spike, painted "U. S. 224.3 B. M."	224.87
T. 18 S., R. 20 E., near quarter corner between secs. 7 and 8, in southwest angle of crossroads, in base of corner fence post; railroad spike, pole 3 feet east painted "U. S. 227.4 B. M."	227.94
Center of culvert at cross roads, painted "224.0"	224

	Feet
T. 18 S., R. 20 E., near quarter corner on west side of sec. 7, in northeast angle of T road east; iron post stamped "Prim. Trav. Sta. No. 2 R. S. 1923," corner fence post painted "U. S. 220.6 P. B. M."	221.168
Reference mark, 160 feet east of P. B. M., in base of 8-inch willow tree; railroad spike	221.83
Junction with T road west, painted "228.2"	229
T. 18 S., R. 19 E., quarter corner on north side of sec. 12, 0.2 mile east of, on south side of road where road approaches levee and at angle in road, 5 feet southeast from corner fence post, in base of willow stump; copper nail and washer painted "U. S. 223.5 B. M."	223.984

From point near northwest corner of quadrangle south to point near Riverdale, thence east through center of quadrangle into Laton quadrangle

T. 17 S., R. 19 E., northeast corner of sec. 2, at T fence south, in corner fence post; spike painted "U. S. 224 B. M."	225.275
T. 16 S., R. 19 E., near southeast corner of sec. 35, in northwest angle of T road north; iron post stamped "Prim. Trav. Sta. No. 7, 1921, R. S. 1 1923," telegraph pole west painted "U. S. 227.2 P. B. M."	227.453
Reference mark, 60 feet southeast of P. B. M., in root on north side of 24-inch poplar tree; spike	228.268
P. B. M., U. S. E. D., T. 17 S., R. 20 E., northwest corner of sec. 6, at T road south of Riverdale; iron post stamped "U. S. E. D. 315 239.6 R. S. 1923"	236.460
Center of road, opposite telephone pole painted "224"	224
T. 17 S., R. 19 E., in southeast corner of sec. 1, in northwest angle of intersection of Davis and Marks avenues, in base of telephone pole; spike, pole painted "U. S. 223.4 B. M."	223.45
Center of road, on top of low ridge, telephone pole opposite painted "229"	229
Center of bridge over irrigation canal, fence opposite painted "224.7"	225
Reference mark, 110 feet southwest of P. B. M., in root on east side of 12-inch willow tree; spike	219.28
T. 17 S., R. 20 E., sec. 18, 312 feet south by 40 feet east of northwest corner of, in pasture 10 feet east of fence line; iron post stamped "Prim. Trav. Sta. No. 15 R. S. 2 1923," telephone pole 110 feet northwest painted "U. S. 222.8 P. B. M."	222.892
Center of bridge over slough, fence southeast painted "222.6"	223
T. 17 S., R. 19 E., in southeast corner of sec. 13, in northwest angle of T road west, in top of corner fence post; spike, telephone pole 60 feet east painted "U. S. 222.8 B. M."	222.99
Center of bridge over Murphy Slough, painted "224.5"	225
Reference mark, 500 feet north of P. B. M., concrete culvert, center of top of east head wall; chiseled square	223.79
Riverdale, 0.5 mile east of, T. 17 S., R. 20 E., southwest corner of sec. 19, in northeast angle of Marks and Mount Whitney avenues; iron post stamped "Prim. Trav. Sta. No. 16 R. S. 3 1923," telephone pole 8 feet north painted "U. S. 223.0 P. B. M."	223.242

	Feet
T. 17 S., R. 20 E., 350 feet west of corner of secs. 19, 20, 29, and 30; center of top of south head wall of concrete culvert; chiseled square, telephone pole 50 feet northwest painted "U. S. 228.7 B. M."	228.98
Center of concrete culvert over irrigation ditch, telephone pole northwest painted "227"	227
Junction with T road north, fence south painted "226.2"	226
T. 17 S., R. 20 E., near corner of secs. 20, 21, 28, and 29, 100 feet east of crossroads, concrete culvert, center of top of north head wall; chiseled square, fence north painted "U. S. 230.9 B. M."	231.24
Center of culvert over irrigation ditch, fence south painted "231.2"	231
Reference mark, 260 feet south of P. B. M., concrete culvert, center of top of east head wall; chiseled square	234.19
T. 17 S., R. 20 E., northwest corner of sec. 27, in southeast angle of intersection of Mount Whitney and Elm avenues, directly in front of gas station, 4 inches below surface of ground; iron post stamped "Prim. Trav. Sta. No. 17 R. S. 4 1923," painted "U. S. 233.4 P. B. M."	233.666
Center of road at top of knoll, fence north painted "237"	237
T. 17 S., R. 20 E., northwest corner of sec. 26, in southeast angle of crossroads, inside pasture, in root on north side of willow tree; spike, telephone pole 30 feet east painted "U. S. 231.3 B. M."	231.59
Center of road crossing on Southern Pacific R. R.; top of east rail, crossing sign painted "235.0"	235
T. 17 S., R. 20 E., northwest corner of sec. 25, in southeast angle of crossroads, on top at east end of concrete culvert; chiseled square, telephone pole 30 feet northeast painted "U. S. 240.3 B. M."	240.64
Center of road at T fence south, fence south painted "237"	238

From point near Riverdale south to south border of quadrangle

Riverdale, 1 mile south by 0.5 mile east of, on east side of road at T road west, in base of corner fence post; railroad spike, painted "U. S. 221.9 B. M."	222.222
Riverdale, 2 miles south by 0.5 mile east of, in southeast angle of crossroads, in base of telephone pole; railroad spike, painted "U. S. 221.7 B. M."	222.06
T. 18 S., R. 19 E., 0.2 mile east of quarter corner on north side of sec. 12, on south side of road where road approaches levee, at small angle in road, 7 feet southeast from corner fence post, in base of willow stump; copper nail, painted "U. S. 223.5 B. M."	223.98

ROUND MOUNTAIN QUADRANGLE

[Latitude 36° 45′–36° 52′ 30″; longitude 119° 30′–119° 37′ 30″]

FRESNO COUNTY

Primary leveling by L. F. Biggs in 1919

From Sanger quadrangle north along highways in west part of Round Mountain quadrangle to Collins

	Feet
Clotho, 2 miles north of, 50 feet southwest of crossroads, in base of gum tree scribed "U. S. 365"; spike	365.10

	Feet
Clotho, 2.8 miles north of, southwest corner of bridge; top of bolthead, painted "U. S. 360"	359.98
Clotho, 4 miles north of, 100 feet north of slough, west edge of road, in concrete post; bronze tablet stamped "1919 B B 81 373"	372.724
Clotho, 5 miles north of, 40 feet northeast of crossroads, in corner fence post painted "U. S. 380"; spike	380.13
Clotho, 6 miles north of, 30 feet southeast of crossroads, in corner fence post painted "U. S. 389"; spike	389.16
Red Bank School, 1 mile south of, 40 feet northwest of T road north, top of 3 by 4 inch post painted "U. S. 403"	403.53
T. 13 S., R. 22 E., quarter corner on north side of sec. 8, northwest corner of Red Bank School yard, in concrete post; bronze tablet stamped "82 1919 B B 411"	410.980
Red Bank School, 0.6 mile west of, at second-class road north, in gatepost painted "U. S. 400"; spike	399.88
Red Bank School, 0.6 mile west by 1 mile north of, at northeast corner of small eucalyptus grove, south of road, in fence post painted "U. S. 414"; spike	414.39
Collins ranch, 1 mile south of, 50 feet northeast of T road west, in corner fence post painted "U. S. 424"; spike	423.87

Primary leveling by L. D. Ryus in 1901 and L. F. Biggs in 1919

From Collins east along highways near north border of quadrangle and north into Academy quadrangle

Collins ranch, 40 feet southeast of T road south and Y road southwest, in base of power pole painted "U. S. 440"; spike	441.04
Collins ranch, about 300 feet south of road crossing at Collins, in sill of flume; nail, marked "438"	434.99
Collins ranch, 1.1 miles east of, opposite second section house, in foot of telephone pole; spike, marked "463"	460.26
Collins ranch, 1.1 miles northeast of, at section house No. 6, south side of road, opposite curve in flume where road leaves flume west of section house; iron post (Bull. 342 + 0.530)	461.379
Section house No. 6, 1.1 miles east of, at northeast corner of bridge over Dog Creek; bolt, marked "465"	462.66
Collins ranch, 2 miles east of, 40 feet east of T road south, in base of power pole 105 painted "U. S. 462"; spike	462.90
Collins ranch, 3 miles east of, at angle to northeast in road, in base of power pole 121 painted "U. S. 476"; spike	476.46
Academy, 1.3 miles southwest of, 30 feet southeast of crossroad north and south, 10 feet east of fence corner, in concrete post; bronze tablet stamped "1919 B B 111 494"	494.300
Academy, 1.33 miles south of, west side of road, in foot of telephone pole; spike, marked "496"	493.59

SANGER QUADRANGLE

[Latitude 36° 37′ 30″–36° 45′; longitude 119° 30′–119° 37′ 30″]

FRESNO COUNTY

Primary leveling by L. D. Ryus in 1902 and L. F. Biggs in 1919

From Malaga quadrangle east along highways in north part of Sanger quadrangle into Wahtoke quadrangle

	Feet
Clotho, 1 mile north of, 10 miles east of Fresno, 30 feet southwest of crossroads, in fence post painted "U. S. 352"; spike (reported destroyed by R. B. Wilcoxon, 1920)	352.01
Fresno, 11 miles east of, opposite T road north, in base of telephone pole 10–25 painted "U. S. 362"; spike	362.54
Centerville, 4 miles west of, 50 feet west of crossroads, south of road on north canal bank; iron post stamped "373"	373.495
Centerville, 3 miles west of, 2 miles north of Sanger, 50 feet southwest of crossroads, south end of concrete culvert; chiseled square, marked "U. S. 381"	380.85
Centerville, 2 miles west of, north of road, in telephone pole painted "U. S. 384"; spike	384.55
Centerville, 1 mile west of, 0.5 mile east of Fowler ditch, south edge of road; iron post stamped "394 B"	394.150
Centerville, 100 feet east of crossroads, south of road, in base of 30-inch eucalyptus tree scribed "U. S. 391"; spike	391.68

Primary leveling by C. A. Ecklund in 1916

From point on Kings River near east border of quadrangle west and north to point 1 mile west of Centerville (Kingsriver)

Sanger, 4 miles southeast of, 1.25 miles west of Alameda School, 200 feet east of long wooden bridge, at northwest corner of T road north; iron post stamped "332"	332.472
Wahtoke, 2 miles west of, 1 mile east of Kings River, at west end of wooden bridge 275 feet long, in north side; nail	336.13
Wahtoke, 3 miles west of, Kings River steel bridge, at east end, in north side; nail	337.38
Sanger, 2 miles southeast of, 1 mile west of Kings River, in south end of wooden culvert; nail	332.78
Sanger, 1.5 miles southeast of, northeast corner of crossroads, 60 feet east of wooden bridge over Kings ditch; iron post stamped "363"	363.812
Sanger, 0.5 mile east of, 70 feet east of Kings ditch, northeast corner of crossroads, in base of fence post; nail	371.92
Sanger, 1 mile northeast of, in base of flume support, road passes under flume; nail (reported destroyed by Wilcoxon, 1920)	377.32
Sanger, 2 miles northeast of, 20 feet west of house, south side of road, in root of tree; nail (reported destroyed by Wilcoxon, 1920)	381.96
Centerville, 1 mile southwest of, at bend in road, west side of road, in base of north gate post; nail	386.67
Centerville, 0.5 mile west of, where road turns west, in northeast end of concrete culvert	395.34
Centerville (Kingsriver post office, discontinued), 1 mile west of, 0.25 mile east of Fowler ditch, south edge of county road; iron post stamped "393" (Bull. 342, p. 112, +0.800)	394.150

Primary leveling by L. F. Biggs in 1919

From Selma quadrangle north along highways in west part of Sanger quadrangle to point 2 miles north of Clotho (leveled twice except last mile)

	Feet
Selma, 4 miles north of, 30 feet southwest of crossroads, in fence post painted "U. S. 325"; spike	325.20
Selma, 5 miles north of, 40 feet southwest of crossroads, west end of concrete culvert; chiseled square, marked "U. S. 334"	334.74
Selma, 6 miles north of, 50 feet southwest of crossroads, at northeast corner of Prairie School yard, in concrete post; bronze tablet stamped "1919 B B 79 334"	334.872
Prairie School, 1 mile north of, south bank of creek, 4 feet east of bridge; top of post to retaining wall, painted "U. S. 340"	339.82
Prairie School, 2 miles north of, 40 feet southwest of crossroads, west end of concrete culvert; chiseled square, marked "U. S. 344"	344.60
Prairie School, 3 miles north of, 50 feet northwest of crossing of Fresno-Sanger and Selma roads, in concrete post; bronze tablet stamped "80 1919 B B 346"	346.501
Clotho, 80 feet southwest of railroad crossing, in power pole, painted "U. S. 348"; spike (reported destroyed by Wilcoxon, 1920)	347.91
Clotho, 1 mile north of, 10 miles east of Fresno, 30 feet southwest of crossroads, in fence post painted "U. S. 352"; spike (reported destroyed by Wilcoxon, 1920)	352.01

SELMA QUADRANGLE

[Latitude 36° 30′–36° 37′ 30″; longitude 119° 30′–119° 37′ 30″]

FRESNO AND TULARE COUNTIES

Precise leveling by C. H. Semper in 1901

From point near Selma southeast along Southern Pacific R. R. into No. 30 quadrangle

	Feet
Selma, 0.8 mile north of, 11 feet south of milepost 220, west side of track, at edge of highway; iron post stamped "310 B"	310.865
Selma, in front of station; top of rail	306.3
Selma, 2.2 miles south of, 8 feet south of milepost 223, west side of track, at edge of highway; iron post stamped "305 B"	305.248

Primary leveling by L. F. Biggs in 1919

From point near Selma along highways east and north into Sanger quadrangle (leveled twice)

Selma, 1 mile north of, 0.5 mile west of, 40 feet southwest of crossroads, in telephone pole painted "U. S. 315"; spike	315.37
Selma, 1 mile north of, 50 feet southeast of crossroads, in base of large eucalyptus tree scribed "U. S. 320"; spike	320.18
Selma, 2 miles north of, 50 feet southwest of crossroads, in corner fence post painted "U. S. 322"; spike	322.03
Selma, 3 miles north of, 30 feet northwest of crossroads, south bank of small canal, in concrete post; bronze tablet stamped "78 1919 B B 326"	326.033

From Reedley quadrangle west and south along highways near east border of Selma quadrangle and east into Reedley quadrangle

	Feet
Reedley Bridge, 2 miles west of, 40 feet southeast of crossroads, south side of concrete bridge; bronze tablet stamped "343 1919 B B 93"	343.544
Reedley Bridge, 2 miles west by 1 mile south of, 40 feet southwest of crossroads, west end of concrete culvert; chiseled square, marked "U. S. 338"	338.07
Reedley Bridge, 2 miles west by 2 miles south of, 50 feet northeast of crossroads, north end of concrete culvert; chiseled square, marked "U. S. 331"	331.70
Reedley Bridge, 2 miles west by 3 miles south of, 60 feet southwest of crossroads, in telephone pole painted 'U. S. 323"; spike	323.84
Reedley Bridge, 2 miles west by 3.5 miles south of, 50 feet northwest of crossroads, southeast corner of Clay School yard, in concrete post; bronze tablet stamped "94 1919 B B 320"	320.618
Clay School, 0.5 mile south of, 100 feet south of crossroads, in power pole painted "U. S. 319"; spike	318.88
Clay School, 0.6 mile south of, top on concrete post marking Fresno-Tulare county line	321.12
Clay School, 1 mile south of, at turn west in road, corner fence post painted "U. S. 296"; spike	296.18
Kingsburg, 2 miles east of, 40 feet northwest of crossroads, in telephone pole painted "U. S. 304"; spike	304.77
Kingsburg, 2.5 miles east of; top of northwest concrete pier of highway bridge over Kings River, painted "U. S. 300"	299.79

From northwest corner of No. 30 quadrangle north along highways near west border of Selma quadrangle to Selma

T. 16 S., R. 22 E., 60 feet southeast of crossroads, at northeast corner of sec. 30, in telephone pole painted "U. S. 282"; spike	282.19
T. 16 S., R. 22 E., northwest corner of sec. 19, 30 feet southeast of crossroads, 1 mile west by 2 miles south of Selma, in concrete post; bronze tablet stamped "289 1919 B B 70"	290.043
Selma, 1 mile east by 1 mile south of, 100 feet northwest of crossroads, in power pole painted "U. S. 294"; spike	294.18
Selma, 1 mile east by 0.5 mile south of, 40 feet southwest of crossroads, west end of concrete culvert; painted "U. S. 307"	307.12
Selma, 1 mile west of, at crossroads; south end of concrete culvert, chiseled "U. S. 308"	309.00

Primary leveling by H. S. Senseney in 1923

Near southwest corner of quadrangle

Reference mark, 12 feet west of post, in fence post; railroad spike	288.32
Kingsburg, 2.4 miles southeast of, 0.6 mile southeast of Kings River bridge, on north side of State highway, at Southern Pacific milepost 228; iron post stamped "Prim. Trav. Sta. No. 12 1921"	298.141

STOKES MOUNTAIN QUADRANGLE

[Latitude 36° 30′–36° 37′ 30″; longitude 119° 07′ 30″–119° 15′]

TULARE COUNTY

Primary leveling by L. F. Biggs in 1919

From Reedley quadrangle east along highways to point 2 miles north of Stokes triangulation station (spur line leveled twice)

	Feet
Orosi Tank, 0.5 mile south by 1.5 miles east of, 40 feet southwest of crossroads, in base of power pole painted "U. S. 417"; spike	417.33
Orosi Tank, 0.5 mile south by 2.5 miles east of, 100 feet east of T road north, in power pole painted "U. S. 428"; spike	427.92
Orosi Tank, 0.5 mile south by 3.5 miles east of, about 2 miles north of Stokes triangulation station, 50 feet northeast of crossroads, at angle north in General Grant Park road, in concrete post; bronze tablet stamped "1919 B B 102 465"	465.211

Primary leveling by F. R. Swearingen in 1923

Near southwest corner of quadrangle

T. 16 S., R. 25 E., at south corner of secs. 33 and 34, at junction with T road north, in center of highway; iron plug, marked "U. S. 346.7 B. M."	347.03
T. 16 S., R. 25 E., at corner of secs. 27, 28, 33, and 34, 20 feet west by 10 feet south of intersection of crossroads, in telephone pole; railroad spike, marked "U. S. 359.3 B. M."	359.58
Cutler, 0.5 mile south by 2 miles east of, west base of Stokes Mountain, 50 feet southeast of crossroads, in east concrete abutment of canal weir; bronze tablet stamped "1919 B. B. 100 381"	381.338

SULTANA QUADRANGLE

[Latitude 36° 30′–36° 37′ 30″; longitude 119° 15′–119° 22′ 30″]

FRESNO AND TULARE COUNTIES

Primary leveling by L. F. Biggs in 1919

From Reedley quadrangle along highways east, north, and west near south, east, and north borders of Sultana quadrangle to Reedley quadrangle

	Feet
Smyrna, 1.2 miles east of, 50 feet southwest of crossroads, west end of concrete culvert; chiseled "U. S. 338"	338.72
Smyrna, 2.2 miles east of, 100 feet east of T road north, in telephone pole painted "U. S. 338"; spike	338.57
Cutler, 0.5 mile south by 1 mile west of, 30 feet southwest of crossroads, south end of concrete culvert; chiseled "U. S. 348"	348.63
Cutler, 0.5 mile south of, west edge of Atchison, Topeka & Santa Fe Ry. right of way, east edge of concrete highway, 50 feet northeast of crossroads, in concrete post; bronze tablet stamped "99 B B 1919 358"	357.941
Cutler, 0.5 mile south by 1 mile east of, 40 feet southeast of crossroads, in base of power pole painted "U. S. 364"; spike	363.94
Cutler, 0.5 mile south by 2 miles east of, west base of Stokes Mountain, 50 feet southwest of crossroads, in east concrete abutment of canal weir; bronze tablet stamped "1919 B B 100 381"	381.338

	Feet
Orosi Tank, 0.5 mile east by 1.5 miles south of, 40 feet north of T road west, in base of power pole 769, painted "U. S. 387"; spike	387.46
Orosi Tank, 0.5 mile east by 0.5 mile south of, 40 feet northwest of crossroads, in base of power pole 751, painted "U. S. 403"; spike	402.94
Orosi Tank, 0.5 mile east by 0.5 mile north of, at T road west, in base of power pole 734, painted "U. S. 408"; spike	407.91
Orosi Tank, 0.5 mile east by 1 mile north of, 40 feet northwest of crossroads, 6 feet northeast of power pole 725, in concrete post; bronze tablet (?) stamped "101 1919 B B 415"	415.612
Orosi Tank, 0.5 mile east by 1.5 miles north of, 40 feet southwest of intersection of Eldorado Road and Santa Cruz Ave., in base of power pole 717 painted "U. S. 432"; spike	432.06
Santa Cruz Ave., top of rail of Atchison, Topeka & Santa Fe Ry	413.2
Orosi Tank, 0.5 mile west of by 1.5 miles north of, 40 feet southwest of crossroads, in base of power pole 694 painted "U. S. 406"; spike	406.53
Orosi, 2 miles north of, 40 feet northeast of crossroads, at base of automobile signboard "Orosi 2 miles, Orange Cove 4 miles," etc., in concrete post; bronze tablet (?) stamped "1919 B B 103 406"	406.198
Orosi, 3 miles north of, 40 feet northwest of crossroads, in base of power pole 662, painted "U. S. 425"; spike	425.02
Orosi, 3.8 miles north of, north edge of road, at base of rocky butte; boulder chiseled "U. S. 436"	436.00
Orange Cove, 1.4 miles east and 0.5 mile south of, 30 feet northwest of crossroads, in base of telephone pole painted "U. S. 454"; spike	454.27
Orange Cove, 1.4 miles east of, 40 feet northeast of crossroads, at base of automobile club signboard, in concrete post; bronze tablet (?) stamped "104 1919 B B 460"	460.761
Orange Cove, 0.4 mile east of, 40 feet northwest of crossroads, in base of power pole painted "U. S. 432" (Tulare-Fresno county line); spike	432.27
Orange Cove, 500 feet northeast of depot, northeast corner of park, opposite Big Tree garage, top of concrete curb; chiseled square, marked "U. S. 424"	423.79
Orange Cove, 0.6 mile west of, 40 feet southwest of crossroads, in base of power pole painted "U. S. 416"; spike	415.88
Orange Cove, 1.6 miles west of, 50 feet northwest of T road east, on fence line, in concrete post; bronze tablet stamped "1919 B B 105 404"	404.491
Orange Cove, 1.6 miles west by 0.5 mile south of, 40 feet northwest of crossroads, in corner fence post painted "U. S. 398"; spike	397.56
From Reedley quadrangle east along highways to point 2 miles north of Stokes triangulation station (spur line leveled twice)	
Orosi Tank, 0.5 mile south by 1.5 miles east of, 40 feet southwest of crossroads, in base of power pole painted "U. S. 417"; spike	417.33
Orosi Tank, 0.5 mile south by 2.5 miles east of, 100 feet east of T road north, in power pole painted "U. S. 428"; spike	427.92
Orosi Tank, 0.5 mile south by 3.5 miles east of, about 2 miles north of Stokes triangulation station, 50 feet northeast of crossroads, at angle north in General Grant Park road, in concrete post; bronze tablet stamped "1919 B B 102 465"	465.211

Primary leveling by F. R. Swearingen in 1923

Near Smyrna

	Feet
T. 16 S., R. 24 E., corner of secs. 27, 28, 33, and 34, 25 feet north by 30 feet west of intersection of crossroads, in telephone pole; spike, marked "U. S. 319.2 B. M."	319.450
Smyrna, 150 feet southeast of station, 40 feet northeast of road crossing, at east edge of railroad right of way, in concrete post; bronze tablet stamped "1919 B. B. 329"	329.897

TRAVER QUADRANGLE

[Latitude 36° 22′ 30″–36° 30′; longitude 119° 22′ 30″–119° 30′]

TULARE COUNTY

Precise leveling by C. H. Semper in 1901

From No. 30 quadrangle southeast along Southern Pacific R. R. across west part of Traver quadrangle into Goshen quadrangle

	Feet
Traver, in front of station; top of rail (Bull. 342, p. 18, +0.5)	285.8
Traver, 0.5 mile south of, 19 feet south of milepost 232, west side of track, at edge of highway; iron post stamped "283 B"	283.321
Traver, 3.5 miles south of, 9 feet south of milepost 235, west side of track, at edge of highway; iron post stamped "271 B"	271.894

Primary leveling by L. F. Biggs in 1919

From Reedley quadrangle south along highways in northwest part of Traver quadrangle to Traver

Kingsburg, 3 miles east by 2 miles south of, opposite T road north, in fence post painted "U. S. 296"; spike	296.33

Primary leveling by R. B. Steele in 1923

From milepost 235 southeast along Southern Pacific R. R. to south border of quadrangle

Traver, 3.5 miles south of, 650 feet north of milepost 235, on west edge of Southern Pacific R. R. track, 2 feet east of right of way fence; iron post stamped "271 B"	271.894
Goshen, 3.25 miles north of, on west side of Southern Pacific R. R. track, opposite milepost 236, in base of telegraph pole; railroad spike, pole painted "U. S. 272.9 B. M."	273.43
Goshen, 2.25 miles north of, on west side of Southern Pacific R. R. track, opposite milepost 237, in base of telegraph pole; railroad spike, pole painted "U. S. 279.1 B. M."	279.64

TRAVER, GOSHEN, VISALIA, TULARE, AND TIPTON QUADRANGLES

[Latitude 36°–36° 30′; longitude 119°–119° 30′]

TULARE COUNTY

Precise leveling by C. H. Semper in 1901–2

From Traver southeast along Southern Pacific R. R. to Tipton

	Feet
Traver, in front of station; top of rail	285.8
Traver, 0.5 mile south of, 19 feet south of milepost 232, west side of track, at margin of highway; iron post stamped "283 B"	283.321

	Feet
Traver, 3.5 miles south of, 9 feet south of milepost 235, west side of track, at margin of highway; iron post stamped "271 B"	271.894
Milepost 238, 10 feet south of, west side of track, at margin of highway; iron post stamped "280 B"	280.457
Goshen, in front of station; top of rail	284.0
Goshen, 1.4 miles south of, opposite milepost 241, east side of track, at margin of highway; iron post stamped "286 B"	286.817
Milepost 244, 10 feet south of, west side of track; iron post stamped "293 B"	293.268
Milepost 247, opposite, east side of track, at fence line; iron post stamped "293 B"	293.832
Tulare, at crossing of Santa Fe Ry.; top of rail	288.8
Tulare, 10 feet south of northeast corner of public library fence, 200 feet south of milepost 250, west side of track; iron post stamped "285 B"	285.196
Tulare, in front of station; top of rail	287.8
Tulare, 2.9 miles south of, 10 feet south of milepost 253, west side of track, at edge of highway; iron post stamped "269 B"	269.645
Milepost 256, 4 feet north of, west side of track, beside highway fence; iron post stamped "266 B"	266.669
Milepost 259, opposite, east side of track, at fence line on east side of highway; iron post stamped "266 B"	266.914
Tipton, in front of station; top of rail	272.5
Tipton, 1.4 miles south of, east side of track, at fence line, opposite milepost 262; iron post stamped "277 B"	277.720
Tipton, 4.4 miles south of, west side of track, opposite milepost 265; iron post stamped "272 B"	273.050

VISALIA QUADRANGLE

[Latitude 36° 15′–36° 22′ 30″; longitude 119° 15′–119° 22′ 30″]

TULARE COUNTY

Primary leveling by F. R. Swearingen in 1923

Near northwest corner of quadrangle

	Feet
Reference mark, 10 feet east of P. B. M., in telephone pole; railroad spike	316.29
T. 18 S., R. 24 E., corner of secs. 11, 12, 13, and 14, 30 feet south by 40 feet west of junction with T road west; iron post stamped "9 M 1923"	315.893
T. 18 S., R. 24 E., corner of secs. 10, 11, 14, and 15, 25 feet west by 25 feet south of intersection of right-angle roads west and south, in telephone pole; railroad spike, marked "U. S. 308.5 B. M."	308.88
T. 18 S., R. 24 E., corner of secs. 9, 10, 15, and 16, 20 feet south by 30 feet east of intersection of crossroads; iron post stamped "10 M 1923"	303.471
Reference mark, 40 feet west of P. B. M., in corner fence post; railroad spike	302.98

East through center of quadrangle, thence south and west to southwest corner

T. 18 S., R. 24 E., corner of secs. 27, 28, 33, and 34, at Oak Grove School, in southeast angle of crossroads; iron post stamped "1 M 1923"	302.645

	Feet
T. 18 S., R. 24 E., corner of secs. 26, 27, 34, and 35, in line with T road north, in fence post; railroad spike, marked "U. S. 308.7 B. M."	309.21
T. 18 S., R. 24 E., 0.25 mile west of corner of secs. 25, 26, 35, and 36, 0.25 mile west of Highway School, in northeast angle of crossroads, on top of north end of concrete culvert; chiseled square, marked "U. S. 312.601 B. M."	313.07
T. 18 S., Rs. 24 and 25 E., near corner of secs. 25, 30, 36, and 31, concrete bridge over Mill Creek, on top of west wing north end of head wall; chiseled square, marked "U. S. 318.8 B. M."	319.21
Visalia, at intersection of Cross and Main streets, on east side of concrete curb around 4-foot oak tree; chiseled square, marked "U. S. 234.2 B. M."	324.66
Visalia, Tulare County courthouse, at east side of steps at south entrance, in granite baluster; aluminum tablet stamped "334 G"	334.363
Visalia, Tulare County courthouse, southeast corner of yard; iron post stamped "2 M 1923"	330.968
T. 18 S., R. 25 E., quarter corner of secs. 28 and 33, in southeast angle of T road south, inside fence, in root on north side of 36-inch oak tree; copper nail and washer, marked "U. S. 338.9 B. M."	339.29
T. 18 S., R. 25 E., corner of secs. 27, 28, 33, and 34, in southeast angle of crossroads, in telephone pole; railroad spike, marked "U. S. 342.5 B. M."	342.91
Tps. 18 and 19 S., R. 25 E., at quarter corner of secs. 3 and 34, in northeast angle of T road north, in corner fence post; railroad spike, marked "U. S. 343.9 B. M."	344.40
T. 19 S., R. 25 E., quarter corner of secs. 3 and 4, in southwest angle of T road west, in root on east side of 36-inch cottonwood tree; copper nail and washer, marked "U. S. 339.2 B. M."	339.68
T. 19 S., R. 25 E., quarter corner of secs. 9 and 10, on east side of road, 30 feet north of T fence east, in base of telephone pole; railroad spike, marked "U. S. 336.1 B. M."	336.63
Reference mark, 10 feet west by 60 feet north of P. B. M., bridge over canal, on top at northwest end of southeast wing of concrete head wall	337.91
T. 19 S., R. 25 E., corner of secs. 9, 10, 15, and 16, in southeast angle of T road east, 60 feet south of bridge over irrigation ditch; iron post stamped "4 M 1923," fence post marked "U. S. 334.6 B. M."	335.135
T. 19 S., R. 25 E., near corner of secs. 15, 16, 21, and 22, in southeast angle of crossroads, corner fence post; railroad spike, marked "U. S. 333.1 B. M."	333.61
T. 19 S., R. 25 E., quarter corner of secs. 21 and 22, in southeast angle of crossroads, in base of telephone pole; railroad spike, marked "U. S. 327.2 B. M."	327.72
T. 19 S., R. 25 E., corner of secs. 21, 22, 27, and 28, in northeast angle of crossroads; iron post stamped "5 M 1923," fence post marked "U. S. 323.7 B. M."	324.189
Reference mark, 60 feet south by 60 feet west of P. B. M., in southwest angle of crossroads, in base of telephone pole; railroad spike	324.51
T. 19 S., R. 25 E., corner of secs. 20, 21, 28, and 29, 72 feet east of T road north and 72 feet east of private road south to Swall Land Co., in base of telephone pole; railroad spike, marked "U. S. 321.4 B. M."	321.90

	Feet
T. 19 S., R. 25 E., corner of secs. 19, 20, 29, and 30, in southeast angle of crossroads; iron post stamped "5 M 1923," fence post marked "U. S. 317.4 B. M."	318.01
T. 19 S., Rs. 24 and 25 E., corner of secs. 19, 24, 25, and 30, in southeast angle of crossroads; iron post stamped "6 M 1923," fence post marked "U. S. 308.7 B. M."	309.248
Reference mark, 60 feet north by 60 feet west of P. B. M., in telephone pole; railroad spike	307.82
T. 19 S., R. 24 E., corner of secs. 23, 24, 25, and 26, in southwest angle of crossroads, in telephone pole; railroad spike, marked "U. S. 203.2 B. M."	302.79
T. 19 S., R. 24 E., corner of secs. 22, 23, 26, and 27, 15 feet west and 3 feet north of fence corner; in telephone pole; railroad spike, marked "U. S. 297.2 B. M."	297.87
Milepost 248, opposite east side of track at fence line; iron post stamped "293 B"	293.832

Primary leveling by H. S. Senseney in 1923

T. 19 S., R. 24 E., 40 feet south of T road west, at quarter corner between secs. 21 and 22, on west side of road, in concrete culvert; chiseled square, marked "U. S. B. M. 292.7"	293.75

Primary leveling by R. B. Steele in 1923

Goshen, 4 miles south of, on east side of Southern Pacific R. R. track, 440 feet north of milepost 243, on east edge of State highway, on concrete culvert, center of top of east head wall; chiseled square, fence northeast painted "U. S. 292.0 B. M."	292.65
Goshen, 5 miles south of 4½ telegraph poles north of milepost 244, on west side of Southern Pacific R. R. track, 2 feet east of west right of way fence; iron post stamped "293 B"	293.268

WAHTOKE QUADRANGLE

[Latitude 36° 37′ 30″–36° 45′; longitude 119° 22′ 30″–119° 30′]

FRESNO COUNTY

From Centerville along highways east and south through west part of quadrangle to Reedley quadrangle

The part to point 3 miles east of Centerville was leveled twice; by L. F. Biggs in 1919 and L. D. Ryus in 1902; and that south to point 1.2 miles south of Wahtoke was leveled twice; by L. F. Biggs in 1919 and C. A. Ecklund in 1916. The remainder was by Biggs alone

	Feet
Centerville, 100 feet east of crossroads, south of road, in base of 30-inch eucalyptus tree scribed "U. S. 391"; spike	391.68
Centerville, 1 mile east of, southeast corner of Kings River Bridge; top of bolthead on concrete foundation, painted "U. S. 392"	392.30
Centerville, 1.5 miles east of, in floor of bridge; bolthead, painted "U. S. 392"	392.14
Centerville, 2 miles east of, 100 feet east of second-class crossroads, center of road, in base of 42-inch oak tree scribed "U. S. 394"; spike	394.59
Centerville, 3 miles east of, 40 feet northeast of T road east to Dunlap; iron post stamped "396" (recovered)	396.180

	Feet
Wahtoke, 2 miles north of, 1 mile north of winery, 50 feet southeast of T road west, in top of canal gate painted "U. S. 381"; nail (recovered)	381.68
Wahtoke, 1.3 miles north of, 0.3 mile northwest of winery, west end of concrete culvert; chiseled "U. S. 367"	366.73
Wahtoke, 1 mile north of, 600 feet west of winery, at T road west, south end of wooden culvert; nail	364.55
Wahtoke, 40 feet northeast of crossroads, 50 feet north of fruit packing house; iron post stamped "357" (recovered)	358.120
Wahtoke, 1.2 miles south of, 40 feet southwest of crossroads, in corner fence post painted "U. S. 373"; spike (recovered)	373.54
Wahtoke, 2 miles south of, 40 feet northwest of crossroads, in corner fence post painted "U. S. 368"; spike	367.35
Wahtoke, 2.8 miles south of, north side of gulch, in telephone pole painted "U. S. 361"; spike	361.72

Primary leveling by C. A. Ecklund in 1916

From Wahtoke west along highways into Sanger quadrangle

Wahtoke, 1 mile south of, southwest corner of crossroads, in base of fence post; nail	373.54
Wahtoke, 1 mile southwest of, 600 feet west of Alameda vineyard, T road south, in south end of wooden culvert; nail	344.07
Wahtoke, 1.5 miles southwest of, west end of lowest step of Alameda School	342.04
Sanger, 4 miles southeast of, 1.25 miles west of Alameda School, 200 feet east of long wooden bridge at T road north; iron post stamped "332"	332.472
Wahtoke, 2 miles west of, 1 mile east of Kings River, at west end of wooden bridge 275 feet long, in north side; nail	336.13

Near northwest corner of quadrangle

Centerville, 1.2 miles northeast of, at road north, in corner fence post painted "U. S. 404"; spike	405.10
Centerville, 1.6 miles northeast of, in floor of canal bridge, painted "U. S. 412"; spike	412.91

DEGREE QUADRANGLE 36°–37°, 120°–121°

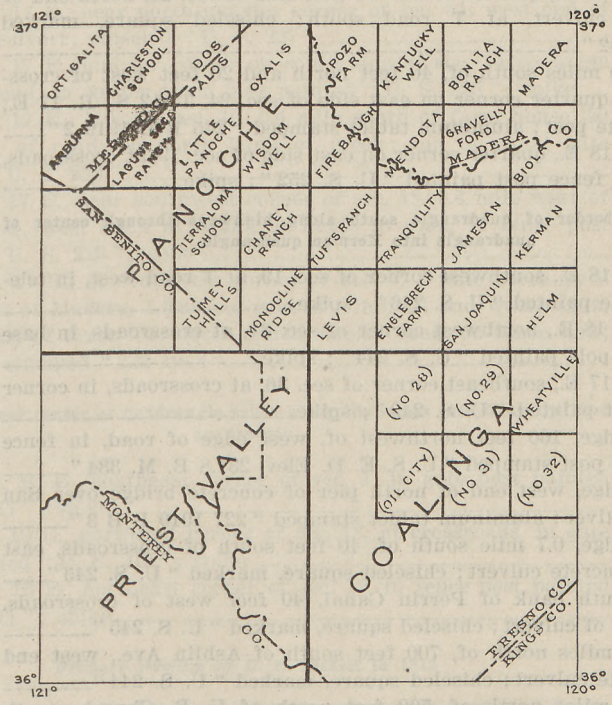


FIGURE 29.—Diagram of degree quadrangle 36°–37°, 120°–121°

ARBURNA QUADRANGLE

[Latitude 36° 45′–36° 52′ 30″; longitude 120° 52′ 30″–121°]

FRESNO AND MERCED COUNTIES

Primary leveling by L. F. Biggs in 1919

From Ortigalita quadrangle south and east along highways in northeast part of Arburna quadrangle into Laguna Seca Ranch quadrangle

	Feet
Old Ortigalita School, 1.0 mile south of, 20 feet west of road; summit of rock, chiseled "U. S. 808"	807.93
Langan ranch house, 0.2 mile northeast of, 800 feet south of road forks, on point of ridge; summit of boulder, chiseled "U. S. 901"	900.92
Langan ranch house, 1.0 mile east of, 50 feet south of crossroads, on summit of flat boulder; bronze tablet stamped "116 1919 B B 1,002"	1,001.813

BIOLA QUADRANGLE

[Latitude 36° 45′–36° 52′ 30″; longitude 120°–120° 07′ 30″]

FRESNO AND MADERA COUNTIES

Primary leveling by L. F. Biggs in 1919

From Madera quadrangle south, east, and north along highways near north border of Biola quadrangle

	Feet
T. 12 S., R. 17 E., quarter corner on west side of sec. 23, west end of brick culvert, at road east; chiseled square, marked "U. S. 235"	235.14
T. 12 S., R. 17 E., quarter corner on east side of sec. 23, north end of concrete culvert, at T road south; chiseled square, marked "U. S. 242"	242.37
Madera, 6.0 miles south of, 40 feet north and 20 feet west of crossroads, at quarter corner on east side of sec. 24, T. 12 S., R. 17 E., in concrete post; aluminum tablet stamped "245 B B 1919 2"	245.766
T. 12 S., R. 18 E., quarter corner on east side of sec. 19, at crossroads, in corner fence post painted "U. S. 252"; spike	252.06

From north border of quadrangle south along highways through center of quadrangle into Kerman quadrangle

T. 12 S., R. 18 E., southwest corner of sec. 19, at T road west, in telephone pole painted "U. S. 246"; spike	246.61
T. 12 S., R. 18 E., northwest corner of sec. 31, at crossroads, in base of power pole painted "U. S. 244"; spike	244.77
T. 12 S., R. 17 E., southeast corner of sec. 36, at crossroads, in corner fence post painted "U. S. 249"; spike	249.12
Skaggs Bridge, 160 feet northwest of, west edge of road, in fence line; iron post stamped "U. S. E. D. Elev. 231.8 B. M. 334"	228.542
Skaggs Bridge, west end of north pier of concrete bridge over San Joaquin River; aluminum tablet stamped "227 1919 B B 3"	227.414
Skaggs Bridge, 0.7 mile south of, 40 feet south of crossroads, east end of concrete culvert; chiseled square, marked "U. S. 245"	245.78
Vinland, south bank of Perrin Canal, 40 feet west of crossroads, north end of culvert; chiseled square, marked "U. S. 245"	245.04
Kerman, 5 miles north of, 700 feet south of Ashlin Ave., west end of concrete culvert; chiseled square, marked "U. S. 244"	244.14
Kerman, 4 miles north of, 500 feet north of U. B. Church, north end of east side of concrete culvert over canal; aluminum tablet stamped "242 1919 B B 4"	242.178
Kerman, 3.5 miles north of, opposite Kerman High School, at T road east, in telephone pole painted "U. S. 231"; spike	231.45
Kerman, 3 miles north of, 50 feet southeast of crossroads, in corner fence post painted "U. S. 227"; spike	227.35

BONITA RANCH QUADRANGLE

[Longitude 36° 52′ 30″–37°; longitude 120° 07′ 30″–120° 15′]

MADERA COUNTY

Primary leveling by L. F. Biggs in 1919

From Kentucky Well quadrangle east along highway to point beyond center of Bonita Ranch quadrangle, thence north to sec. 7, T. 11 S., R. 17 E.

	Feet
T. 11 S., R. 16 E., south side of sec. 33, 50 feet west of canal bridge, north fence line of road, opposite power pole 181, in concrete post; bronze tablet stamped "191 13 1919 B B"	192.134
T. 11 S., R. 16 E., south side of sec. 34, in front of power pole 165, in fence post painted "U. S. 199"; spike	199.17

	Feet
T. 11 S., R. 16 E., south side of sec. 35, in base of power pole 149 painted "U. S. 206"; spike	206.35
T. 11 S., R. 16 E., southeast corner of sec. 35, in base of power pole 140 painted "U. S. 209"; spike	209.67
Tps. 11 and 12 S., Rs. 16 and 17 E., corner of secs. 1, 6, 31, and 36, at north road fence, 30 feet east of power pole 125, on concrete post; bronze tablet stamped "218 B B 1919 14"	218.029
T. 11 S., R. 17 E., quarter corner on south side of sec. 31, at T road south, in power pole 120 painted "U. S. 221"; spike	221.81
T. 11. S., R. 17 E., near north quarter corner of sec. 31, west end of concrete culvert; chiseled "U. S. 227"	227.68
T. 11 S., R. 17 E., quarter corner on south side of sec. 19, at angle west in road, in corner fence post painted "U. S. 225"; spike	225.81
T. 11 S., R. 17 E., NW. ¼ sec. 19, 0.4 mile south of farm house, 50 feet west of road, on north bank of creek; top of canal gate painted "U. S. 233"	233.31
T. 11 S., R. 17 E., near southwest corner of sec. 18, 0.4 mile west of farm house, west bank of canal, at angle in road, in fence post painted "U. S. 229"; spike	229.80
T. 11 S., R. 17 E., at southwest corner of sec. 7, 1 mile north by 6 miles west of Madera, 1,000 feet east of windmill and water tank, 50 feet east of fence line north, north side of road, on fence line; iron post stamped "222 1913"	222.497

From point near center of quadrangle south along highways into Gravelly Ford quadrangle

T. 12 S., R. 16 E., southeast corner of sec. 1, in gate post painted "U. S. 217"; spike	217.16
T. 12 S., R. 16 E., northeast corner of sec. 18, at crossroads, in gate post painted "U. S. 215"; spike	215.95
T. 12 S., R. 16 E., northeast corner of sec. 19, in fence post painted "U. S. 211"; spike	211.88

Primary leveling by D. S. Birkett in 1913

From Madera quadrangle west along highways near north border of Bonita Ranch quadrangle into Kentucky Well quadrangle

T. 11 S., R. 17 E., northwest corner of sec. 16, 1.25 miles north by 4 miles west of Madera, south side of road, 50 feet east of T in electric-power line, in power-line pole marked "U. S. 240 B. M."; railroad spike	240.25
T. 11 S., R. 17 E., northwest corner of sec. 17, 1.25 miles north by 5 miles west of Madera, south side of road, at angle in telephone line; railroad spike in telephone pole, marked "U. S. 233 B. M."	233.09
T. 11 S., R. 17 E., SW. ¼ sec. 7, 1.25 miles north by 6 miles west of Madera, 1,000 feet east of windmill and water tank, 50 feet east of fence leading north, north side of road, on fence line; iron post stamped "1913 222"	222.497
T. 11 S., R. 16 E., near quarter corner between secs. 11 and 14, 0.5 mile north of ranch house, 75 feet south of intersection of fence, 50 feet south of small slough, in gate post marked "U. S. 213 B. M."; railroad spike	213.65

	Feet
T. 11 S., R. 16 E., near northeast corner of sec. 15, 1.25 miles north by 8 miles west of Madera, 12 feet south of intersection of fences, in gate post marked "U. S. 212 B. M."; railroad spike	212.59
T. 11 S., R. 16 E., 33 feet east and 33 feet north of quarter corner between secs. 15 and 16, 0.75 mile north by 9 miles west of Madera; iron post stamped "1913 200"	200.993

CHANEY RANCH QUADRANGLE

[Latitude 36° 37′ 30″–36° 45′; longitude 120° 30′–120° 37′ 30″]

FRESNO COUNTY

Primary leveling by L. F. Biggs in 1919

From Sheep Ranch quadrangle south along highways near east border of Chaney Ranch quadrangle to Telephone, thence southwest to Hayes

	Feet
Tps. 13 and 14 S., R. 13 E., corner of secs. 1, 2, 35, and 36; top of 4-inch iron pipe filled with concrete buried flush with ground, marked "U. S. 274" on 2 by 4 inch redwood stake	274.18
T. 14 S., R. 13 E., NW. ¼ sec. 2, 400 feet south of second-class crossroads, 30 feet west of road, in concrete post; bronze tablet stamped "275 1919 68 B B"	275.102
M. & L. Telephone ranch, 3.2 miles north of, north bank of Panoche Creek, 20 feet west of road; top of 2 by 6 inch redwood stake, scribed "U. S. 299"	299.42
M. & L. Telephone ranch, 2.2 miles north of, 20 feet west of road; top of 2 by 2 inch stake, scribed "U. S. 298"	298.30
M. &. L. Telephone ranch, 7.4 miles north of, 50 feet northwest of crossroads; top of 2 by 6 inch redwood stake, scribed "U. S. 306"	306.15
M. & L. Telephone ranch, 180 feet northwest of windmill, near fence corner, in concrete post; bronze tablet stamped "316 1919 B B 71"	315.414
M. & L. Telephone ranch, 0.6 mile south of, in telephone pole, scribed "U. S. 318"; spike	318.04
M. & L. Chaney ranch, 2.9 miles northeast of, in telephone pole; painted "U. S. 341"; spike	340.96
Chaney ranch, 1.8 miles northeast of, north of road, 5 feet east of white telephone pole, in concrete post; bronze tablet stamped "366 72 1919 B B"	365.541
Chaney ranch, 0.7 mile northeast of, in telephone pole, painted "U. S. 393"; spike	392.80
Chaney ranch, 60 feet north of Mendota road, at pipe line crossing, in telephone pole 36–7, scribed "U. S. 411"; spike	411.63
Chaney ranch, 1.2 miles west of, 30 feet north of road, 80 feet northeast of canal, 10 feet east of telephone pole, in concrete post; bronze tablet stamped "73 1919 B B 440"	440.043
Chaney ranch, 2 miles west of, in telephone pole, scribed "U. S. 461"; spike	460.52
Chaney ranch, 3.2 miles west of, 100 feet west of creek, in telephone pole, scribed "U. S. 499"; spike	498.36
Hayes, on road leading from Mendota and Fresno to mouth of Big Panoche Canyon, 95 feet north of Hayes store; iron post stamped "502 Cal. 1918 G"	502.143

From Tierra Loma School quadrangle southeast along highways to Chaney

	Feet
Tierra Loma School, 3.4 miles southeast of, 6 feet east of Valley pipe line, 15 feet southeast of crossroads, 5 feet north of telephone pole 39–23, in concrete post; bronze tablet stamped "390 1919 B B 39"	390.301
Tierra Loma School, 4.3 miles southeast of, at crossroads, in base of telephone pole 39–0 scribed "U. S. 400"; spike	400.89
Tierra Loma School, 5.3 miles southeast of, Valley Pipe Line Co.'s pipe line bridge over Panoche Creek, in south concrete abutment; bronze tablet stamped "405 1919 B B 40"	405.447
Chaney ranch house, 1.0 mile northwest of, in base of telephone pole 37–2 scribed "U. S. 407"; spike	407.70
Chaney ranch, 60 feet north of Mendota road, at pipe-line crossing, in telephone pole 36–7 scribed "U. S. 411"; spike	411.63

From Telephone ranch along highways near east border of quadrangle

M. & L. Telephone ranch, 0.6 mile south of, in telephone pole painted "U. S. 318"; spike	318.04
M. & L. Telephone ranch, 1.8 miles south of, 1,000 feet north of crossroads, 20 feet west of road; top of 2 by 4 inch redwood stake scribed "U. S. 317"	316.85
M. & L. Telephone ranch, 2.0 miles south of, 40 feet northwest of crossroads, in concrete post; bronze tablet stamped "74 1919 B B 319"	319.393
M. & L. Telephone ranch, 4.4 miles south of, 0.5 mile east of water tank, 30 feet west of road; top of 2 by 4 inch redwood stake scribed "U. S. 337"	336.62

CHARLESTON SCHOOL QUADRANGLE

[Latitude 36° 52′ 30″–37°; longitude 120° 45′–120° 52′ 30″]

MERCED COUNTY

Primary leveling by L. F. Biggs in 1919

From Dos Palos quadrangle and Camp No. 13 northwest along highways to Charleston School

	Feet
Camp 13, 300 feet southwest of house, bridge over northern of two canals, in east end of south concrete abutment; bronze tablet stamped "133 1919 B B 35"	133.526
Camp 13, 0.9 mile northwest of, northeast corner of canal bridge; spike, painted "U. S. 132"	132.51
Camp 13, 2 miles northwest of, sixth telephone pole south of telephone line west, at angle north in canal; spike, painted "U. S. 128"	128.77
Charleston School, 1.0 mile south by 2 miles east of, 500 feet east of large barn, 30 feet east of bridge over canal, at fence corner, in concrete post; bronze tablet stamped "128 1919 B B 36"	128.063
Charleston School, 1.2 miles east of, at head gate 292, in floor of culvert, painted "U. S. 128"; spike	128.94
Charleston School, northeast corner of school yard, at junction of wagon road and canal; iron post stamped "149 G 1909"	149.120

POLITECHNIKA GDAŃSKA ZAKŁAD GEOLOGII

From Charleston School along highway west 3.2 miles to northwest corner of quadrangle, thence south 2 miles and into Ortigalita quadrangle (leveled twice)

	Feet
Charleston School, northeast corner of school yard, at junction of wagon road and canal; iron post stamped "149 G 1909" (Bull. 81, p. 84)	149.120
Charleston School, 1 mile northwest of, southwest corner of canal bridge, painted "U. S. 149"	150.02
Charleston School, 1.5 miles northwest of, southwest corner of canal bridge, at crossroads; spike (disturbed, bridge broken down)	149.03
Charleston School, 1.5 miles north by 1 mile west of, at five corners, in corner fence post painted "U. S. 156"; spike	155.96
Charleston School, 1 mile north by 2.5 miles west of, center of second-class crossroads; top of rock buried flush with ground, chiseled "U. S. 169"	169.47
Valley pump station No. 5, 0.5 mile northeast of, in floor of canal bridge painted "U. S. 206"; spike	206.27
Valley pump station No. 5, 0.4 mile east of, at second-class crossroads, in corner fence post painted "U. S. 228"; spike	228.60

From point near Valley pump station in Ortigalita quadrangle southeast along highways to Laguna Seca Ranch quadrangle (leveled twice to b. m. 354)

Valley pump station No. 5, 1.5 miles southeast of, in base of corner fence post painted "U. S. 250"; spike	250.78
Valley pump station No. 5, 2.6 miles southeast of, in base of telephone pole 61–4 painted "U. S. 261"; spike	261.96
Valley pump station No. 5, 3.5 miles southeast of, 10 feet west of gate, 15 feet west of Valley pipe line, on concrete post marking east and west section line; bronze tablet stamped "110 1919 B B 317"	317.432
Valley pump station No. 5, 4.5 miles southeast of, in base of telephone pole 58–7 painted "U. S. 318"; spike	318.45
Valley pump station No. 5, 6.5 miles southeast of, in base of telephone pole 57–4 painted "U. S. 332"; spike	332.48
Little Panoche Creek, 7.5 miles northeast of; iron post stamped "341 1909 G" (Bull. 481, p. 84, Elev. 340.52). This bench mark disturbed and reset on pipe line as follows:	
Valley pump station No. 5, 7.6 miles southeast of, 7.5 miles north of Panoche Creek, 6 feet east of Valley pipe line, 10 feet west of telephone pole 56–5; iron post stamped "354 G 1909"	354.235
Valley pump station No. 5, 8.5 miles southeast of, in base of telephone pole 53–4 painted "U. S. 301"; spike	301.43

Primary leveling by W. H. Monahan in 1909

From Laguna Seca Ranch quadrangle north along highways to Los Banos quadrangle

Little Panoche Creek, 5.40 miles northwest of, at base of foothills, 0.25 mile north of wagon road, a large stone sunk in the ground 2 feet, wooden post sunk beside it; aluminum tag stamped "363"	363.35
Little Panoche Creek, 6.45 miles northwest of, 15 feet west of wagon road, 1,650 feet south of old deserted building, 0.50 mile east of foothills; iron post stamped "Cal. 1909 341 G"	340.744

	Feet
Little Panoche Creek, 7.44 miles northwest of, 10 feet north of wagon road, 1 mile east of foothills; a bottle in ground with post sunk beside it, aluminum tag stamped "287"	286.31
Little Panoche Creek, 8.48 miles northwest of, 10 feet west of wagon road between canal and foothills; a bottle in ground with board sunk beside it, aluminum tag stamped "214"	213.84
Little Panoche Creek, 9.98 miles northwest of, at forks of road, 75 feet west of San Joaquin & Kings River Canal & Irrigation Co.'s (Inc.) canal; iron post stamped "Cal. 1909 150 G"	149.960
Jamison ranch, Miller & Lux, proprietors, at southeast corner of fence surrounding dwelling, in fence post; spike, aluminum tag stamped "149"	148.87
Jamison ranch, 1.31 miles northwest of, in fence post, 25 feet west of canal; spike, aluminum tag stamped "149"	148.68
Charleston School, northeast corner of school yard, at junction of wagon road and canal; iron post stamped "1909 149 G"	149.120
Charleston School, 1.17 miles northwest of, on west side of road, 25 feet west of canal, in fence post; spike, aluminum tag stamped "147"	146.790

Primary leveling by L. F. Biggs in 1919

From point 1.2 miles east of Charleston along highways north 1 mile and east 3 miles (leveled twice)

Charleston, 1 mile north by 1 mile east of, 100 feet southeast of canal bridge, in fence post painted "U. S. 124"; spike	124.56
Charleston, 1 mile north by 2 miles east of, at T fence and second-class road north, in fence post painted "H. S. 109"; spike	109.94
Charleston, 1 mile north by 3 miles east of, at angle in fence north, in corner fence post painted "U. S. 105"; spike	105.42
Charleston, 1 mile north by 4 miles east of, 20 feet west of canal, at turn in road south, in corner fence post painted "104"; spike	104.85

COALINGA QUADRANGLE

[Latitude 36°–36° 30′; longitude 120°–120° 30′]

FRESNO AND KINGS COUNTIES

Primary leveling by W. V. Hardy in 1903, by J. W. Muller in 1907, and by L. F. Biggs and W. H. Monahan in 1908

From bench mark 4 miles west of Lethent west along Southern Pacific R. R. to Alcalde

	Feet
Huron, 4.3 miles northeast of, 50 feet south of track, 3 feet east of telegraph milepost 276; iron post stamped "306 G"	306.666
Huron schoolhouse, 2.5 feet south of entrance; iron post stamped "380 G"	380.731
Arroyo Pasajero, 1 mile southwest of, 50 feet south of track, 3 feet east of telegraph milepost 285; iron post stamped "455 G"	455.647
Ora, 4 miles east of, 50 feet south of track, 8 feet north of wagon road, 5 feet east of telegraph milepole 290; iron post stamped "569 G"	569.702
Ora, 2.1 miles east of, 50 feet south of track, 5 feet east of telegraph milepole 292; iron post stamped "606 G"	606.601

	Feet
Ora, 2.5 feet west of telegraph pole marked with name of station, south of oil tanks, 50 feet south of tracks, 2 feet north of wire fence; iron post stamped "647 G"	647.687
Coalinga, southwest end of station; iron post stamped "671 G." (This bench mark has been moved, but its elevation is not materially changed)	671.652
Coalinga, 1.7 miles southwest of, in mouth of Waltham Canyon, 800 feet north of ranch house, 50 feet south of track, 10 feet northwest of road junction; iron post stamped "716 G"	716.610
Alcalde, 70 feet north of station, between signboard posts; iron post stamped "852 G"	852.714
From point 1.7 miles southwest of Coalinga north and east to California Limited Oil Co.'s property, thence south to Ora	
Coalinga, 3 miles west of, 20 feet east of road, 120 feet northeast of southwest corner of sec. 30, T. 20 S., R. 15 E.; iron post stamped "No. 1, 1907 G 766"	766.623
Coalinga, 5 miles northwest of, 1 mile north of Associated Oil Co.'s pump plant, 30 feet east of section corner, 10 feet east of road; iron post stamped "824 No. 2, 1907 G"	824.065
Coalinga, 7.5 miles northwest of, 1,000 feet north of big tank house where road crosses summit, 40 feet east of road; iron post stamped "1,244 No. 3, 1907 G"	1,244.756
Coalinga, 8 miles north of, on Oil City road, 50 feet west of large drain, 10 feet southwest of junction of roads; iron post stamped "1,157 No. 4 1907 G"	1,158.062
Coalinga, 12 miles north of, 400 feet south of California Limited Oil Co.'s office, 300 feet north of big machine shops, 10 feet south of road, 2 feet east of fence on line between secs. 21 and 22, T. 19 S., R. 15 E.; iron post stamped "1,467 No. 5, 1907 G"	1,467.488
Coalinga, 10.5 miles northeast of, on fence line between property of Standard Oil Co. and California Limited Oil Co., on north and south line, south end of fence, top of iron fence post 8 inches in diameter, 4 feet high; painted point, post painted "U. S. B. M. 973," aluminum tag stamped "973" tacked on post brace	973.62
Coalinga, 9 miles northeast of, 400 feet west of Standard Oil Co.'s pump plant No. 1, 100 feet southwest of large black oil tank, 30 feet southwest of junction of roads; iron post stamped "806 No. 6, 1907 G"	806.843
Coalinga, 6.5 miles northeast of, on road to Standard Oil Co.'s pump plant No. 1, 40 feet south of junction of four roads, 50 feet west of Coalinga and Fresno signboard; iron post stamped "816 No. 7, 1907 G" (disturbed)	816.781
Coalinga, 4 miles northeast of, 50 feet west of road to Standard Oil Co.'s pump plant No. 1; iron post stamped "718 No. 8, 1907 G"	718.970
Ora, 100 feet south of station, 50 feet south of Southern Pacific railroad track, 400 feet south of Southern Pacific Co.'s big oil tanks, on W. V. Hardy's level line; iron post stamped "647 G"	647.687
From Jones ranch northwest to Coalinga	
Kranhagen's ranch, 1.9 miles northwest of, 15 feet east of road; iron post stamped "1117 B 1908 51 B"	1,116.966

	Feet
Kranhagen's ranch, 4 miles northwest of, 0.8 mile west of L. Kranhagen's house, 30 feet south of section corner at road junction; iron post stamped "923 B 52 B 1908"	922.827
L. Kranhagen's house, 0.9 mile northwest of, 500 feet east of schoolhouse, 50 feet south of creek, south of road; iron post stamped "806 B 1908 B 53"	806.165
Alvis ranch, 0.4 mile northwest of house, 25 feet south of junction of roads; iron post stamped "672 B 1908"	672.058
Coalinga, 5.5 miles southeast of, 20 feet east of road, 25 feet northeast of wash, 350 feet north of cabin, at junction of road; iron post stamped "737 B 1908 B 55"	737.016
Coalinga, 2.5 miles southeast of, at junction of roads, 0.5 mile south of ranch house; iron post stamped "647 B 1908 B 56"	646.822

From point about 5 miles west of Alcalde to Coalinga, thence east and north to point about 13 miles southeast of Hayes

Crump's ranch, 5.2 miles east of, south of road, 50 feet south of Lewis Creek, in Waltham Canyon; iron post stamped "1076 B 1908 Cal"	1,076.503
Coalinga, in front of station; top of rail	670.3
Ora, 8 miles northeast of, 20 feet west of wagon road, opposite small canyon on right; iron post stamped "648 B 1908 Cal"	648.948
Standard Oil Co.'s pumping station, 2.8 miles north of, 25 feet east of wagon road, on sidehill; iron post stamped "653 Cal 1908 B"	653.776
T. 19 N., R. 16 E., sec. 2, 10 feet west of wagon road, 250 feet south of Imperial Oil Co.'s pumping plant; iron post stamped "635 Cal 1908 G"	635.497
Imperial Oil Co.'s pumping station, 4.1 miles north of, at foothill of range, 10 feet south of wagon road; iron post stamped "503 Cal 1908 G"	503.192
Imperial Oil Co.'s pumping station, 6.4 miles north of, on line fence, 785 feet from southwest corner of Ladd's ranch; iron post stamped "504 Cal 1908 G"	504.441
Ladd's ranch, 3.5 miles northwest of, 1.5 miles northwest of clump of cottonwood trees, opposite large canyon on left; iron post stamped "480 Cal 1908 G"	480.400
Ladd's ranch, 8 miles northwest of, 2,798 feet south of gulch leading from canyon; iron post stamped "553 Cal 1908 G"	553.760
Ladd's ranch, 11.9 miles northwest of, southeast corner of new barn at base of foothills, on a small plateau, 100 feet north of ravine; iron post stamped "578 Cal 1908 G"	577.409

From Crump's ranch south to Stone Canyon

Stone Canyon, 7.5 miles northeast of, 1,000 feet northeast of G. E. Frame's ranch house, in large oak tree on west side of road; spike with aluminum tag stamped "1341"	1,341.55
Stone Canyon, 5.8 miles east of, on top of mountain 700 feet east of large canyon, on north side of road; iron post stamped "1908 Cal 1699 B"	1,699.699
Stone Canyon, 4 miles east of, south of road, on top of knoll where road turns to left, in base of small oak tree; spike with aluminum tag stamped "2593"	2,593.83

	Feet
Stone Canyon, 3 miles east of, 5 feet north of road where road leaves underbrush and enters open, in base of small oak tree; spike with aluminum tag stamped "3173"	3,173.57
Stone Canyon, 1.3 miles east of, 10 feet north of road, east of gulch, in base of large oak tree; spike with aluminum tag stamped "2883"	2,883.22

Primary leveling by Corps of Engineers, U. S. Army, in San Joaquin Valley in 1913–14

T. 16 S., R. 17 E., 20 feet north of southeast corner of sec. 36, on Fitzwilliam ranch, north side of road, 2 feet west of fence running north; iron post set in cement (U. S. C. E. b. m. 317)	194.497
Standard Oil Co.'s town pumping station, about 1.5 miles northwest of, on Coalinga to Mendota line, 50 feet north of fifth pole north of milepost 102 of Standard Oil Co.'s telephone line; iron post set in cement (U. S. C. E. b. m. 318)	202.900

DOS PALOS QUADRANGLE

[Latitude 36° 52′ 30″–37°; longitude 120° 37′ 30″–120° 45′]

FRESNO AND MERCED COUNTIES

Primary leveling by L. F. Biggs in 1919

From Dos Palos south along highways into Little Panoche quadrangle

	Feet
Dos Palos, 0.5 mile north by 0.5 mile west of, 50 feet southeast of crossroads, in base of power pole 588 painted "U. S. 114"; spike	114.86
Dos Palos, east side of concrete step to entrance to post office; chiseled square, marked "U. S. 116"	116.82
Dos Palos Union High School, south side of west entrance, top of concrete coping; bronze tablet stamped "120 22 BB 1919"	121.080
Dos Palos, 1 mile south of, southeast corner of bridge; spike, painted "U. S. 119"	119.61
Dos Palos, 1.4 miles south of, at T road north, east end of concrete culvert; chiseled "U. S. 121"	121.67
Dos Palos, 1.4 miles south by 1 mile west of, opposite T road north, in base of power pole painted "U. S. 116"; spike	116.34
South Dos Palos Grammar School, east end of steps, top of concrete coping; bronze tablet stamped "119 B B 1919 23"	119.403
South Dos Palos, 1 mile south of, in telephone pole painted "U. S. 122"; spike	122.43
South Dos Palos, 2.2 miles south of, in base of power pole painted "U. S. 131"; spike	131.94
South Dos Palos, 2.5 miles south of, west end of south concrete abutment of canal bridge; chiseled square, marked "U. S. 138" (reported destroyed)	138.83
South Dos Palos, 3.8 miles south of, southwest corner of canal bridge, in top of concrete retaining wall; bronze tablet stamped "154 1919 B B 24"	154.249
South Dos Palos, 4.9 miles south of, at T road west to Ora Loma, in power pole painted "U. S. 168"; spike	168.25

	Feet
South Dos Palos, 5.5 miles south of, at southwest corner of Dos Palos rancho yard, 20 feet northeast of T road east, on concrete post; bronze tablet stamped "176 1919 B B 25"	176.119

From point 2.5 miles south of Dos Palos west along highways across center of quadrangle to Charleston School quadrangle

South Dos Palos, 2.5 miles south by 1 mile west of, in base of telephone pole painted "U. S. 131"; spike	136.01
South Dos Palos, 2.5 miles south by 2.2 miles west of, at T fence north, in canal gate at lateral north, painted "U. S. 138"; spike	138.53
South Dos Palos, 2 miles south by 3 miles west of, 0.3 mile northeast of house with red roof, in telephone pole painted "U. S. 133"; spike	133.19
South Dos Palos, 2 miles south by 3.5 miles west of, 2.6 miles east of Camp 13, 100 feet south of south one of three canals, in front of two abandoned houses, 10 feet east of gate, on fence line, on concrete post; bronze tablet stamped "134 1919 B B 34"	134.202
Camp 13, 0.9 mile east of, top of lateral head gate 250; spike, painted "U. S. 135"	135.77

ENGLEBRECHT FARM QUADRANGLE

[Latitude 36° 30′–36° 37′ 30″; longitude 120° 15′–120° 22′ 30″]

FRESNO COUNTY

Primary leveling by L. F. Biggs in 1919

From Tranquillity quadrangle southeast along highways into San Joaquin quadrangle

	Feet
Mendota oil station, 1.4 miles southeast of, in base of telephone pole 114; spike, painted "U. S. 169"	168.70
Mendota oil station, 2.4 miles southeast of, 6 feet west of telephone pole 112–24, in concrete post; bronze tablet stamped "169 1919 B B 53"	169.570
Mendota oil station, 3.3 miles southeast of, 50 feet south of main north and south road crossing, in base of telephone pole 112–4 painted "U. S. 174"; spike	174.32
Mendota oil station, 4.1 miles southeast of, at branch telephone line leading south, in telephone pole 111–7 painted "U. S. 179"; spike	179.25
Mendota oil station, 5.3 miles southeast of, 20 feet north of fourth telephone pole north of milepost 110; iron post stamped "319 U. S. E. D. Elev. 189.0" (U. S. E. D. elev.=188.98)	185.380

From point 2.4 miles southeast of Mendota oil station east along highways into San Joaquin quadrangle

Mendota oil station, 2.4 miles southeast of, 6 feet west of telephone pole 112–24, in concrete post; bronze tablet stamped "169 1919 B B 53"	169.570
Tranquillity, 2.6 miles southwest of, at T road west, in corner fence post painted "U. S. 168"; spike	168.35

FIREBAUGH QUADRANGLE

[Latitude 36° 45′–36° 52′ 30″; longitude 120° 22′ 30″–120° 30′]

FRESNO AND MADERA COUNTIES

Primary leveling by L. F. Biggs in 1919

From Mendota quadrangle west along highways near north border of Firebaugh quadrangle to Firebaugh (leveled twice)

	Feet
Firebaugh, 3.3 miles east of, north of road, at T fence north, in corner fence post painted "U. S. 151"; spike	151.86
Firebaugh, 2.4 miles east of, north of road, at second-class road north, in fence post painted "U. S. 148"; spike	148.34
Firebaugh, 2 miles east of, southwest corner of bridge over canal, in floor; spike painted "U. S. 149"	150.12
Firebaugh, 1.2 miles east of, north side of road, east bank of San Joaquin River, in corner fence post painted "U. S. 150"	150.36
Firebaugh, 600 feet south of approach to San Joaquin River bridge, at northeast corner of barn; iron post stamped "U. S. E. D. 368" (U. S. E. D. elev.=152.74)	149.081
Firebaugh Bridge over San Joaquin River, top of southwest concrete pier of bridge; bronze tablet stamped "151 B. B. 1919"	151.775

From Firebaugh west along highways to Sheep Ranch quadrangle

Firebaugh, 600 feet south of station, 100 feet west of Southern Pacific R. R., in base of power pole painted "U. S. 149"; spike	149.57
Firebaugh, 1 mile west of, in floor of canal bridge painted "U. S. 158"; spike	158.15
Firebaugh, 2.5 miles west of, 60 feet north of crossroads, in telephone pole 132–12 painted "U. S. 163"; spike	163.17
Firebaugh, 3.5 miles northwest of, in base of telephone pole 70–1; spike, painted "U. S. 159"	161.52

From Mendota quadrangle northwest across northeast part of Firebaugh quadrangle to Firebaugh (leveled twice)

M. & L. Helm ranch, 2 miles north of, west side of road, 30 feet west of canal, 415 feet north of old canal bridge; iron post stamped "U. S. E. D. 364 162.4" (U. S. E. D. elev.=162.36)	158.820
M. & L. Helm ranch, 3 miles northwest of, 50 feet south of canal, at southeast corner of abandoned homestead; iron post stamped "U. S. E. D. B. M. 365 157.7" (U. S. E. D. elev.=157.72)	154.150
M. & L. Helm ranch, 3.8 miles northwest of northeast bank of canal, at angle in canal west; iron post stamped "U. S. E. D. B. M. 366 160.6" (U. S. E. D. elev.=160.62)	157.070
Firebaugh, 2 miles southeast of, 200 feet west of river, 10 feet south of road, 40 feet east of north and south fence line; iron post stamped "U. S. E. D. 367 155.2" (U. S. E. D. elev.=155.24)	151.560
Firebaugh, 1 mile south of; east end of canal bridge, painted "U. S. 154"	153.45

Near southeast corner of quadrangle

Mendota, in front of station, top of rail	174.1
Mendota, at northwest corner of schoolyard, in concrete post; bronze tablet stamped "174 47 1919 B B"	174.152
Mendota, 0.5 mile northwest of, in concrete base of semaphore 174.0; chiseled "U. S. 175"	174.76
M. & L. Helm ranch, 200 feet southeast of mess hall, in gate post painted "U. S. 157"; spike	157.14

GRAVELLY FORD QUADRANGLE

[Latitude 36° 45′–36° 52′ 30″; longitude 120° 07′ 30″–120° 15′]

FRESNO AND MADERA COUNTIES

Primary leveling by L. F. Biggs in 1920

From southwest corner of Madera quadrangle southwest into Gravelly Ford quadrangle, thence west along highways into Mendota quadrangle

	Feet
T. 12 S., R. 17 E., southwest corner of sec. 16, at T road east, in corner fence post painted "U. S. 222"; spike	222.13
T. 12 S., R. 17 E., northwest corner of sec. 28, at T road east, in power pole painted "U. S. 221"; spike	221.10
T. 12 S., R. 17 E., near southeast corner of sec. 19, in fence post painted "U. S. 215"; spike	215.50
T. 12 S., R. 17 E., center of sec. 30, 8.8 feet south and 0.5 foot east of pipe in well under windmill which marks Last Chance triangulation station, in concrete post; bronze tablet stamped "210 1919 B B 6"	210.401
T. 12 S., Rs. 16 and 17 E., corner of secs. 19, 30, 24, and 25, at T fence east, in corner fence post painted "U. S. 208"; spike	208.00
T. 12 S., R. 16 E., near southeast corner of sec. 23, northeast corner of south one of three concrete watering troughs at M. & L. Cottonwood cow camp; chiseled square, marked "U. S. 202"	202.92
M. & L. Cottonwood cow camp, 0.7 mile west of, at T fence north, in corner fence post painted "U. S. 196"; spike	196.35
T. 12 S., R. 16 E., 0.4 mile south of, northwest corner of sec. 27, 5 feet north of gate on fence line at entrance to M. & L. Aliso ranch, in concrete post; bronze tablet stamped "189 B B 1919 7"	189.337
T. 12 S., R. 16 E., 0.4 mile south of northwest corner of sec. 28, in gate post painted "U. S. 184"; spike	183.98
From north border of quadrangle south along highways to San Joaquin River	
T. 12 S., Rs. 16 and 17 E., corner of secs. 19, 30, 24, and 25, at T fence east, in corner fence post painted "U. S. 207"; spike	208.00
T. 12 S., Rs. 16 and 17 E., corner of secs. 25, 36, 30, and 31, at T fence east; top of 4 by 4 inch corner stake, "U. S. 207" painted on fence post	207.94
T. 12 S., Rs. 16 and 17 E., 300 feet east of south common corner of secs. 36 and 31, at angle south in road; iron post stamped "208 1919 B B"	208.283
T. 13 S., R. 17 E., near northeast corner of sec. 12, 20 feet west of gate, at T fence west, in fence post painted "U. S. 204"	205.06
M. & L. Gravelly Ford ranch, 1.5 miles northeast of, 200 feet north of canal, at T road and fence north, in corner fence post; spike, painted "U. S. 203"	203.78
M. & L. Gravelly Ford ranch, 2 miles east of, 100 feet north of river, in base of 18-inch willow tree scribed "U. S. 201"; spike	201.34
T. 13 S., R. 17 E., 1,900 feet north and 1,900 feet east of southwest corner of sec. 16, 96 feet south of river, near grove of eucalyptus trees; iron post stamped "U. S. E. D. B. M. 350 Elev. 204.0"	200.690
From point near Jamesan north to San Joaquin River (leveled twice)	
T. 14 S., R. 16 E., northwest corner of sec. 3, in fence post painted "U. S. 178"; spike	178.11
Jamesan, 3.7 miles north by 1 mile west of, 150 feet west of slough, 250 feet south of river, at bend north in river; iron post stamped "U. S. E. D. 354 188.6"	185.250

HELM QUADRANGLE

[Latitude 36° 30′–36° 37′ 30″; longitude 120°–120° 07′ 30″]

FRESNO COUNTY

Primary leveling by L. F. Biggs in 1909

From point near northeast corner of quadrangle southwest along highways to point 2.3 miles north of Helm (leveled twice)

	Feet
McMullin, 3.2 miles southwest of, south of road; top of 2 by 4 inch redwood stake scribed "U. S. 208"	209.02
McMullin, 4 miles southwest of, south edge of road, 6 feet north of 2-inch galvanized milepost, in concrete post; bronze tablet stamped "205 59 1919 B B"	205.082
McMullin, 5 miles southwest of, north of road; top of 2 by 4 inch redwood stake scribed "U. S. 200"	201.08
McMullin, 6 miles southwest of, south of road; top of 2-inch galvanized gas pipe milepost, painted "U. S. 198"	198.36
McMullin, 7 miles southwest of, 100 feet northeast of road to Kerman, in end of fence post painted "U. S. 191"; spike	191.74
T. 15 S., Rs. 17 and 18 E., at T road north to Kerman, in 4-inch iron pipe, corner of secs. 25, 36, 30, and 31; top of bolt, painted "193"	193.07
T. 16 S., R. 17 E., northeast corner of sec. 2, south side of McMullin-Coalinga road; iron post stamped "U. S. E. D. 321 Elev. 194.8" (U. S. E. D. Elev.=194.77)	191.289
McMullin, 9.8 miles southwest of, southwest corner of long bridge over canal, in floor, painted "U. S. 192"; spike	192.45

From point 2 miles north of Helm, south along highways into Wheatville quadrangle

Helm, 1.3 miles north of, south end of canal bridge; spike painted "U. S. 188"	188.58
Helm, 50 feet northwest of crossroads, in concrete post; bronze tablet stamped "186 1919 B B 186"	186.477
Helm, 1 mile south of, west end of canal bridge, painted "U. S. 191"	190.96
Helm, 2 miles south of, west end of concrete canal culvert; chiseled square, marked "U. S. 193"	193.15

From San Joaquin quadrangle southeast along highways to point 2 miles north of Helm

San Joaquin School, 0.7 mile northeast of, 50 feet southeast of crossroads, at corner of orchard, in corner fence post, painted "U. S. 172"; spike	173.20
San Joaquin, 0.5 mile north by 1 mile east of, 20 feet north of crossroads, at southwest corner of bridge; bolthead, painted "U. S. 177"	176.50
San Joaquin, 2.7 miles east of, 200 feet southwest of oil derrick (Derrick triangulation station), at south edge of road, at fence corner; bronze tablet stamped "62 178 1919 B B"	178.276
Derrick, 0.7 mile southeast of, on levee, in gatepost painted "U. S. 189"; spike	188.64
Derrick, 1.2 miles southeast of, north end of weir; spike, painted "U. S. 184"	183.37

	Feet
Derrick, 2 miles southeast of, on levee, in gatepost painted "U. S. 191"; spike	190.82
Derrick, 2.5 miles southeast of, east end of bridge at road west; bolthead, painted "U. S. 189"	188.97
McMullin, 9.8 miles southwest of, southwest corner of long bridge over canal, in floor, painted "U. S. 192"; spike	192.45

From Helm quadrangle south along highways to point 7 miles southwest of McMullin

Kerman, 7 miles south of, west of road, in large fence post painted "U. S. 195"; spike	195.07
Kerman, 8 miles south of, west of road, in corner fence post painted "U. S. 193"; spike	192.98
McMullin, 7 miles southwest of, 100 feet northeast of road north to Kerman, in corner fence post painted "U. S. 191"; spike	191.74

Primary leveling by L. O. Newsome in 1923

Along east border of quadrangle into Wheatville quadrangle

McMullin, 4 miles southwest of, south edge of road, 6 feet north of 2-inch galvanized-iron milepost, in concrete; bronze tablet stamped "205 59 1919 B B"	205.082
T. 15 S., R. 18 E., corner of secs. 21, 22, 27, and 28, at T road south, 0.5 mile north of oil derrick; nail in fence post, marked "U. S. 210 B. M."	210.48
T. 15 S., R. 18 E., near corner of secs. 27, 28, 33, and 34, on east side of road; iron post stamped "213 1923 N"	213.698
Tps. 15 and 16 S., R. 18 E., near corner of secs. 3, 4, 33, 34; iron post stamped "U. S. E. D. B. M. No. 322 Elev. 210.5"	207.102
T. 16 S., R. 18 E., corner of secs. 9, 10, 15, and 16; iron post lettered "S. McKay L. S. Section Corner"	204.368
T. 16 S., R. 18 E., near corner of secs. 15, 16, 21, and 22, 0.5 mile southwest of red house, in west edge of right of way road; iron post stamped "204 1923 N"	203.816
Burrel, 2 miles northwest of, near corner of secs. 21, 22, 27, and 28, T. 16 S., R. 18 E., southwest fence corner at crossroads; nail in power pole marked "U. S. 200 B. M."	200.39
Burrel, 1 mile northwest of, near corner of secs. 27, 28, 33, and 34, T. 16 S., R. 18 E., 100 feet south of T road west; nail in power pole marked "U. S. 199 B. M."	199.24

JAMESAN QUADRANGLE

[Latitude 36° 37′ 30″–36° 45′; longitude 120° 07′ 30″–120° 15′]

FRESNO COUNTY

Primary leveling by L. F. Biggs in 1919

From Kerman quadrangle west along highways near north border of Jamesan quadrangle into Tranquillity quadrangle (leveled twice)

	Feet
Kerman, 1 mile north by 4 miles west of, near telephone pole 95–15, in corner fence post painted "U. S. 201"; spike	201.76
Kerman, 1 mile north of, 5 miles west of, near telephone pole 94–15, in corner fence post; spike, painted "U. S. 197"	197.06

	Feet
Kerman, 1 mile north of, 6 miles west of, 150 feet northeast of T road north, 60 feet east of telephone pole 93–15; iron post stamped "U. S. E. D. 333. Elev. 196.1" (U. S. E. D. elev. 196.08)	192.704
Kerman, 1 mile north by 7 miles west of, at base of telephone pole 92–15, in top of 3 by 3 inch stake painted "U. S. 185"; spike	185.51
Jamesan triangulation station, 1 mile north by 8 miles west of Kerman, 250 feet southwest of T road south to Jamesan; iron post stamped "187 44 B B 1919"	187.427
Whites Bridge, 6.8 miles east of, in base of telephone pole 90–15 painted "U. S. 176"; spike	176.29
Whites Bridge, 5.8 miles east of, in base of telephone pole 89–12 painted "U. S. 171"; spike	171.33

From point 7.8 miles east of Whites Bridge along highways south and southwest to San Joaquin quadrangle near its northwest corner

Jamesan, east end of switch, in concrete base of semaphore 1848; chiseled square, "U. S. 179"	179.76
Jamesan, 1.3 miles south of, east side of road, in fence post painted "U. S. 169"; spike	169.09
Jamesan, 2.6 miles south of, southwest corner of bridge over Kings Slough; iron post stamped "173 1919 B B 76"	173.032
Tranquillity, 1.6 miles north of, 40 feet west of road, south end of concrete inverted siphon under canal; chiseled square, marked "U. S. 164"	164.65
Tranquillity, 1 mile north of, west bank of Fresno Slough, in front of pump station; iron post stamped "174.4 U. S. E. D. B. M. 11, 228" (U. S. E. D. elev.=174.37)	170.880
Tranquillity, road crossing; top of rail	169.7
Tranquillity, south side of door to entrance to Ford garage, in concrete floor; chiseled square, marked "U. S. 164"	164.79
Tranquillity, 1 mile south of, at road west to Mendota pump station, in floor of canal bridge; nail painted "U. S. 168"	168.20

KENTUCKY WELL QUADRANGLE

[Latitude 36° 52′ 30″–37°; longitude 120° 15′–120° 22′ 30″]

MADERA COUNTY

Primary leveling by L. F. Biggs in 1919

From Aliso triangulation station in Mendota quadrangle northeast along highways through southeast part of Kentucky Well quadrangle into Bonita Ranch quadrangle

	Feet
Aliso triangulation station, 0.8 mile northeast of, south end of small bridge; spike, painted "U. S. 168"	168.64
Aliso triangulation station, 2 miles northeast of, north side of road, in fence post painted "U. S. 172"; spike	172.02
Aliso triangulation station, 3 miles northeast of, in floor of southwest corner of bridge painted "U. S. 179"; spike	179.50
Tps. 11 and 12 S., R. 15 E., corner of secs. 34, 35, 2, and 3, on fence line, 20 feet west of power pole 246, at T in power line north, on concrete post; bronze tablet stamped "167 1919 B B 12"	167.418
Aliso triangulation station, 3.6 miles northeast of, north end of bridge; spike, painted "U. S. 178"	178.66

	Feet
T. 11 S., R. 16 E., southwest corner of sec. 32, in power pole 200 painted "U. S. 183"; spike	183.49

Primary leveling by D. S. Birkett in 1913

From Bonita Ranch quadrangle south of its northwest corner along highways west and north to point near north border of Kentucky Well quadrangle, thence west into Pozo Farm quadrangle

T. 11 S., R. 16 E., 50 feet north of quarter corner between secs. 17 and 18 (west quarter corner of block 15, Chowchilla Subdivision No. 2), in fence post marked "U. S. 188 B. M."; railroad spike	188.60
T. 11 S., R. 16 E., northwest corner of sec. 17 (southeast corner of block 14, Chowchilla Subdivision No. 2), 5 feet south of, in fence post marked "U. S. 190 B. M."; railroad spike	190.78
T. 11 S., R. 16 E., southeast corner of sec. 6 (southeast corner of block 1, Chowchilla Subdivision No. 2), intersection of fences, in fence post marked "U. S. 196 B. M."; railroad spike	196.19
T. 11 S., R. 15 E., 35 feet north by 270 feet west of southeast corner of sec. 1 (southwest corner of block 1, Chowchilla Subdivision No. 2), 330 feet west of McLaughlin Well; iron post stamped "1913 187"	187.744
T. 11 S., R. 15 E., 50 feet east and 40 feet north of southwest corner of sec. 1 (southwest corner of block 2, Chowchilla Subdivision No. 2), in fence post marked "U. S. 179 B. M."; railroad spike	179.36
T. 11 S., R. 15 E., southwest corner of sec. 2 (southwest corner of block 3, Chowchilla Subdivision No. 2), 50 feet north by 15 feet east of intersection of fences, in gate post marked "U. S. 174 B. M."; railroad spike	174.96
T. 11 S., R. 15 E., southwest corner of sec. 3 (southwest corner of block 4, Chowchilla Subdivision No. 2); top of corner post	168.40
T. 11 S., R. 15 E., 0.2 mile west of quarter corner between secs. 4 and 9 (quarter corner between blocks 5 and 10, Chowchilla Subdivision No. 2), 45 feet northeast of Kentucky Well, 65 feet northeast of old ranch house; iron post stamped "1913 164"	164.371
T. 11 S., R. 15 E., near southwest corner of sec. 5 (near southeast corner of block 6, Chowchilla Subdivision No. 2), 20 feet north of intersection of north and south fence with Berenda Slough, in fence post marked "U. S. 158 B. M."; railroad spike	158.38
T. 11 S., R. 15 E., southwest corner of sec. 6 (southeast corner of block 7, Chowchilla Subdivision No. 2); top of corner post	152.95

KERMAN QUADRANGLE

[Latitude 36° 37′ 30″–36° 45′; longitude 120°–120° 07′ 30″]

FRESNO COUNTY

Primary leveling by L. F. Biggs in 1919

From Biola quadrangle along highways south and east in northeast part of Kerman quadrangle into Kearney Park quadrangle

	Feet
Kerman, 2 miles north of, 50 feet southwest of crossroads, in power pole painted "U. S. 224"; spike	224.80
Kerman, 1 mile north of, 50 feet northeast of intersection of Madera Ave. and Whites Bridge road; iron post stamped "U. S. E. D. 334, Elev. 225.5" (U. S. E. D. elev.=225.45)	222.319

	Feet
Kerman, 1 mile north of, 40 feet southeast of intersection of Madera Ave. and Whites Bridge road, east end of concrete culvert; chiseled "U. S. 223.0" (Highway elev.=223.96)	223.50
Kerman, 1 mile north by 1 mile east of, at T road north, in base of telephone pole 100–15, painted "U. S. 226"; spike	226.12
Kerman, 1 mile north by 2 miles east of, 100 feet west of crossroads, south end of concrete culvert; chiseled square, marked "U. S. 231"	231.84
Highway bench mark 84, 237.24 (not described	236.82
Kerman, 1 mile north and 3 miles east of, 40 feet southwest of crossroads, south end of concrete culvert; chiseled square, marked "U. S. 238"	238.37

From Kerman west along highways into Jamesan quadrangle (leveled twice)

Kerman, 1 mile north of, 40 feet southeast of intersection of Madera Ave. and Whites Bridge road, east end of concrete culvert; chiseled "U. S. 223"	223.50
Kerman, 1 mile north by 1 mile west of, at T road north, in base of telephone pole 98–15 painted "U. S. 217"; spike	217.60
Kerman, 1 mile north by 2 miles west of, at T road north, in base of telephone pole 97–15 painted "U. S. 209"; spike	209.28
Kerman, 1 mile north by 3 miles west of, south edge of road, 50 feet east of T road north, 200 feet east of house, in concrete post; bronze tablet stamped "206 1919 B B 43"	206.745

From Kerman south along highways into Helm quadrangle

Kerman, 1 mile north of, 40 feet southeast of crossroads, east end of concrete culvert; chiseled "U. S. 223"	223.50
Kerman, northeast corner of Kerman Mercantile Co.'s building, in concrete sidewalk; chiseled square, marked "U. S. 217"	217.22
Kerman, 1 mile south of, at crossroads, in telephone pole painted "U. S. 213"; spike	213.07
Kerman, 2 miles south of, at T road east, in corner fence post painted "U. S. 212"; spike	212.80
T. 14 S., Rs. 17 and 18 E., 50 feet northwest of corner of secs. 25, 36, 30, and 31, west edge of highway, in concrete post; bronze tablet stamped "207 1919 63 B B"	207.886
Kerman, 4 miles south of, 50 feet southwest of T road west, in corner fence post painted "U. S. 205"; spike	205.08
Tps. 14 and 15 S., R. 17 E., 20 feet south of corner of secs. 35, 36, 1, and 2; iron post stamped "U. S. E. D. 327 (U. S. E. D. elev. 205.55")	202.137
Kerman, 5 miles south of, east side of road, in gatepost painted "U. S. 200"; spike	200.48
T. 15 S., Rs. 17 and 18 E., 60 feet southeast of corner of secs, 12, 13, 17, and 18, east edge of road, in concrete post; bronze tablet stamped "197 1919 B B 64"	197.682

Near southeast corner of quadrangle

McMullin, 3.2 miles southwest of, south of road; top of 2 by 4 inch redwood stake scribed "U. S. 208"	209.02

From point near northeast corner of quadrangle south along highways and east into Kearney Park quadrangle

	Feet
Kerman, 1 mile north by 3 miles east of, 40 feet southwest of crossroads, south end of concrete culvert; chiseled square, marked "U. S. 238"	238.37
Rugg, 1 mile south of, 40 feet northwest of crossroads, west end of concrete culvert; chiseled mark, marked "U. S. 236"	236.77
Rugg, 2 miles south of, 40 feet northeast of crossroads, in base of telephone pole painted "U. S. 232"; spike	231.76
Rugg, 3 miles south of, T. 14 S., R. 18 E., 500 feet west of corner of secs. 21, 22, 27, and 28, east edge of railroad right of way, 15 feet north of road, in fence line, in concrete post; bronze tablet stamped "227 1919 B B 56"	227.269

LAGUNA SECA RANCH QUADRANGLE

[Latitude 36° 45′–36° 52′ 30″; longitude 120° 45′–120° 52′ 30″]

FRESNO AND MERCED COUNTIES

Primary leveling by L. F. Biggs in 1919, partly releveling a line by Monahan in 1909

From Charleston School quadrangle southeast along highways across northeast part of Laguna Seca Ranch quadrangle to Little Panoche quadrangle

	Feet
Valley pump station No. 5, 9.5 miles southeast of, in base of telephone pole 52–4 painted "U. S. 291"; spike	291.59
Little Panoche Creek, 3.4 miles north of, 150 feet west of gate on east and west fence line; iron post stamped "Cal. 1909 G." (This bench mark was reset on fence line.) Elevation before being reset=383.389 feet; after being reset	383.397
Little Panoche Creek, 2.5 miles north of, at northeast corner of bridge; top of 12 by 12 inch post scribed "U. S. 435"	435.74
Little Panoche Creek, 1.5 miles north of, 20 feet west of road; top of 1 by 4 inch redwood stake painted "U. S. 451"	452.00

From Arburna quadrangle near its northeast corner along highways southeast to Panoche Creek, thence northeast to Little Panoche quadrangle

Laguna Seca ranch house, 600 feet west of, at spring; top of watering trough painted "U. S. 862"	861.17
Laguna Seca ranch house, 1 mile southeast of, 10 feet east of road; at summit; top of rock painted "U. S. 898"	897.18
Laguna Seca ranch house, 1 mile southeast of, 10 feet east of road; top of rock painted "U. S. 901"	900.32
Laguna Seca ranch, 1 mile south of, in first canyon west of road; top of rock, painted "U. S. 906"	906.36
Laguna Seca ranch, 2.5 miles south of, 50 feet west of road; in top of boulder buried flush with ground; bronze tablet stamped "1,030 1919 B B 117"	1,029.954
Laguna Seca ranch, 3.6 miles south of, 200 feet east of Y road northwest; top of boulder; chiseled "U. S. 894"	894.01
Laguna Seca ranch, 5 miles south of, 30 feet south of road, at summit, near Fresno-Merced county line; top of rock, painted "U. S. 1,058"	1,057.83
Little Panoche Creek, 2.5 miles north of, 10 feet east of road, top of rock, painted "U. S. 995"	995.94

	Feet
Little Panoche Creek, 1.4 miles north of, at second-class road east, top of rock, painted "U. S. 848"	847.53
T. 13 S., R. 11 E., in southeast part of sec. 19; northeast corner of Panoche Creek bridge, painted "U. S. 600"	599.47
T. 13 S., R. 11 E., in southeast part of sec. 19; 55 feet southeast of Panoche Creek bridge, in top of boulder buried flush with ground; bronze tablet stamped "600 118 1919 B B"	600.316
Mouth of Little Panoche Canyon, 2 miles west of, 100 feet south of road; top of boulder, chiseled "U. S. 550"	549.98
Mouth of Little Panoche Canyon, 1 mile west of, southeast corner of bridge; spike, painted "U. S. 493"	492.96
Mouth of Little Panoche Canyon, in southeast corner of red barn, painted "U. S. 475"; spike	474.62

Primary leveling by W. H. Monahan in 1909

From Little Panoche Creek, Little Panoche quadrangle, northwest along highways across northeast part of Laguna Seca Ranch quadrangle to Charleston School quadrangle

Little Panoche Creek, 1.51 miles northwest of, 2.50 miles northeast of Avery ranch, in post 4 by 4 inches by 4 feet sunk 2 feet in ground; spike, aluminum tag stamped "407"	406.52
Little Panoche Creek, 2.45 miles northwest of, 10 feet east of wagon road leading north from Avery ranch; aluminum tag stamped "425"	424.78
Little Panoche Creek, 4.44 miles northwest of, 500 feet west of wagon road leading north from Avery ranch, at base of foothills; a bottle in ground with board sunk beside it, aluminum tag stamped "351"	350.66

LEVIS QUADRANGLE

[Latitude 36° 30′–36° 37′ 30″; longitude 120° 22′ 30″–120° 30′]

FRESNO COUNTY

Primary leveling by L. F. Biggs in 1919

From Tufts Ranch quadrangle south along east edge of Levis quadrangle to point near southeast corner, thence west to point 11.9 miles northwest of Ladds ranch (leveled twice)

	Feet
Mendota, 9 miles south of, 1 mile southeast of oil pump station, east margin of road, at southwest corner of sec. 18, T. 15 S. R., 15 E., in concrete post; bronze tablet stamped "48 1919 B B 199"	199.560
Mendota, 10 miles south of, east edge of road; top of 2 by 4 inch redwood stake, painted "U. S. 202"	202.59
Mendota, 10.8 miles south of, 100 feet northeast of crossroads; top of 2 by 4 inch redwood stake, painted "U. S. 208"	208.56
Mendota, 12 miles south of, 0.5 foot south of 4-inch iron pipe, at corner of Tps. 15 and 16 S., Rs. 14 and 15 E., in concrete post buried flush with ground; bronze tablet stamped "231 49 1919 B B"	232.006

	Feet
T. 16 S., Rs. 14 and 15 E., corner of secs. 1, 12, 6, and 7; top of 4-inch iron pipe, "U. S. 266" painted on 2 by 4 inch redwood stake	266.17
T. 16 S., R. 14 E., southeast corner of sec. 12, northeast corner of field around abandoned house, in corner fence post painted "U. S. 311"	311.05
T. 16 S., Rs. 14 and 15 E., corner of secs. 13, 24, 18, and 19; top of bolt to 4-inch iron pipe, "U. S. 347" painted on 2 by 4 inch redwood stake	347.21
T. 16 S., Rs. 14 and 15 E., 0.5 foot north of 4-inch iron pipe at corner of secs. 19, 30, 24, and 25, 1 mile northeast of Cantua triangulation station, 10 feet west of road, in concrete post; bronze tablet stamped "382 1919 B B 51"	382.198
T. 16 S., R. 14 E., corner of secs. 23, 24, 25, and 26, 40 feet west of road under telephone line, top of 4 by 4 inch section corner, painted "U. S. 421"	421.93
T. 16 S., R. 14 E., corner of secs. 22, 23, 26, and 27, 10 feet south of road; top of 2 by 4 inch redwood stake, painted "U. S. 434"	434.56
T. 16 S., R. 14 E., corner of secs. 21, 22, 27, and 28; top of 2 by 4 inch redwood stake, painted "U. S. 495"	495.10
T. 16 S., R. 14 E., 600 feet northeast of corner of secs. 20, 21, 28, and 29, 0.4 mile west of Valley pipe line telephone pole 24–16, 100 feet southwest of abondoned house; iron post stamped "578 1908"	577.409

From Tufts Ranch quadrangle near its southwest corner southeast along highways to point 11.9 miles northwest of Ladds ranch

M. & L. Telephone ranch, 5.2 miles south of, 100 feet southeast of crossroads; top of stake, scribed "T. 15 S., VII. U. S. 347" on 1 by 6 inch redwood board	346.81
M. & L. Telephone ranch, 6.4 miles south of, 20 feet east of road at Y road south; top of 2 by 6 inch redwood plank, scribed "U. S. 367"	366.48
M. & L. Telephone ranch, 6.7 miles south of, 1 mile east by 0.3 mile north of Valley pipe-line pump station, 10 feet south of fence corner, in concrete post; bronze tablet stamped "75 1919 B B 365"	365.277
Valley pipe-line pump station, 1 mile east by 0.5 mile south of, in corner fence post painted "U. S. 373"; spike	373.16
Tps. 15 and 16 S., Rs. 13 and 14 E., in corner fence post; spike, painted "U. S. 379"	378.25
Valley pipe-line pump station, 2.5 miles southeast of, at T road south, in base of telephone pole 28–17 painted "U. S. 407"; spike	406.42
Valley pipe-line pump station, 3.7 miles southeast of, in telephone pole 27–11 painted "U. S. 468"; spike	467.81
Valley pipe-line pump station, 4.8 miles southeast of, in telephone pole 26–8 painted "U. S. 478"; spike	478.41
Valley pipe-line pump station, 5.9 miles southeast of, in telephone pole 25–6, painted "U. S. 534"; spike	533.96
T. 16 S., R. 14 E., 600 feet northeast of corner of secs. 20, 21, 28, and 29, 0.4 mile west of Valley pipe-line telephone pole 24–16, 100 feet southwest of abondoned house; iron post stamped "578 1918"	577.409

Primary leveling by W. H. Monahan in 1908

From Ciervo Hills quadrangle northwest across Levis quadrangle into Monocline Ridge quadrangle

	Feet
Ladd's ranch, 10.57 miles northwest of, at edge of foothills, in fence post on section line fence; spike, aluminum tag stamped "576" (correction to Bull. 481 here is 0.56)	575.20
Ladd's ranch, 11.87 miles northwest of, at base of foothills, on a small plateau, 100 feet north of ravine, at south edge of corner of new barn; iron post stamped "Cal 1908 578 G"	577.409
Ladd's ranch, 12.93 miles northwest of, at base of foothills leading from Cantua Creek to the Cheney ranch; bottle in ground on west side of wagon road, aluminum tag stamped "546"	545.55
Ladd's ranch, 13.87 miles northwest of, 20 feet west of wagon road along foothills to Cheney's ranch, 600 feet north of a swale which was former camp of J. H. Sinclair; a bottle sunk in ground, board sunk in ground, marked "538"	537.05
Ladd's ranch, 14.93 miles northwest of, 50 feet east of creek, 10 feet east of road leading from Cantua Creek to Cheney's ranch; iron post stamped "Cal 1908 495 G"	494.342

LITTLE PANOCHE QUADRANGLE

[Latitude 36° 45′–36° 52′ 30″; longitude 120° 37′ 30″–120° 45′]

FRESNO COUNTY

Primary leveling by L. F. Biggs in 1919

From Dos Palos quadrangle north along highways, thence south through east part of Little Panoche quadrangle into Tierra Loma School quadrangle

	Feet
South Dos Palos, 6.5 miles south of, 50 feet west of road, at T road west; top of 2 by 4 inch redwood stake scribed "U. S. 189"	189.42
South Dos Palos, 2.5 miles south of, west of road, in front of house, in corner fence post painted "U. S. 202"; spike	202.36
T. 12 S., R. 12 E., southwest corner of sec. 34, 0.5 mile southwest of Miller No. 2, west side of road, at T fence east, on concrete post; bronze tablet stamped "213 B B 1919 26"	213.253
Tierra Loma School, 6.8 miles north of, west of road, at L in fence west, in corner fence post painted "U. S. 225"; spike	226.07
Tierra Loma School, 5.7 miles north of, at crossroads, in corner fence post, painted "U. S. 241"; spike	241.62
Tierra Loma School, 4.7 miles north of, west side of road, 600 feet north of Y road southwest, top of 2 by 4 inch redwood stake scribed "U. S. 262"	263.08
T. 13 S., R. 12 E., northeast corner of sec. 28, 30 feet southwest of crossroads, 3.7 miles north of Tierra Loma School, 2.0 miles east of Shell triangulation station No. 1, on concrete post; bronze tablet stamped "286 1919 B B 27"	286.114
Tierra Loma School, 2.7 miles north of, 400 feet northeast of small white house, in corner fence post (painted "U. S. 311"; spike (reported destroyed)	311.23

From point 3.7 miles north of Tierra Loma School west along highways to point 2.4 miles northwest of Shell pump station No. 4

T. 13 S., R. 12 E., northeast corner of sec. 28, 30 feet southwest of crossroads, 3.7 miles north of Tierra Loma School, 2 miles east of Shell No. 1 triangulation station, on concrete post; tablet stamped "286 1919 B B 27"	286.114

	Feet
T. 13 S., R. 12 E., corner of secs. 20, 21, 28, and 29, in corner fence post painted "U. S. 344"; spike	344.23
Shell pump station No. 4 (Shell triangulation station No. 1), 0.4 mile northwest of, at crossroads, in base of telephone pole 46–24 painted "U. S. 414"; spike	414.20
Shell pump station No. 4, 2.4 miles northwest of, 500 feet west of old road; iron post stamped "523 Cal. 1909 G"	523.087

Primary leveling by W. H. Monahan in 1908

From Tierra Loma School quadrangle northwest along highways through southwest part of Little Panoche quadrangle into Laguna Seca Ranch quadrangle

Hayes, 8.97 miles northwest of, 1 mile northeast of sheep ranch; a bottle sunk in ground with board sunk beside it, aluminum tag stamped "597"	596.45
Hayes, 10.06 miles northwest of, about 0.75 mile north of southwest section line, in post 2 by 4 inches by 4 feet, sunk in ground; spike, aluminum tag stamped "600"	599.69
Hayes, 11.10 miles northwest of, 2.50 miles south of Little Panoche Creek; iron post stamped "Cal. 1908 523 G"	523.087
Hayes, 12.04 miles northwest of, 10 feet west of wagon road leading from Hayes to Avery ranch and to mouth of Little Panoche Canyon, 1.64 miles southeast of Avery ranch, in post sunk in ground; spike, aluminum tag stamped "484"	484.16
Little Panoche Creek, 1.50 miles northeast of Avery ranch, 45 feet north of north bank; iron post stamped "Cal. 1909 407 G"	406.800

MADERA QUADRANGLE

[Latitude 36° 52′ 30″–37°; longitude 120°–120° 07′ 30″]

MADERA COUNTY

Precise leveling by C. H. Semper in 1901–2

From Madera southeast along Southern Pacific R. R. to Borden

	Feet
Madera, in front of station; top of rail	272.5
Madera, in front face of northeast corner of county courthouse; aluminum tablet stamped "274 B"	274.518
Borden, in front of station; top of rail	270.1
Borden, 1,000 feet south of station, 100 feet south of milepost 187, west side of track, at corner of fence; iron post stamped "269 B"	269.950

Primary leveling by Roscoe Reeves in 1915

From point 3 miles northwest of Madera east along highway to four corners 4 miles northeast of Madera

Madera, 3 miles northwest of, west of track, opposite milepost 181; iron post stamped "270" (see Bull. 342, p. 17, described as milepost 182)	270.920
Madera, 3 miles north of, 750 feet northeast of farmhouse, on northeast corner post of barnyard; railroad spike marked "275"	275.14
Madera, 3 miles north of, in northeast corner of crossroads, 1.4 miles east of Southern Pacific R. R.; railroad spike marked "278"	278.16

	Feet
Madera, 3 miles north of, 2 miles east of Southern Pacific R. R., 500 feet west of second-class road south, in corner fence post on north side of road; railroad spike marked "284"	284.24
Madera, 3 miles north by 1 mile east of, on west side of track on first culvert of Santa Fe Ry. north of milepost 1022; aluminum tablet stamped "297"	297.499
Madera, 3 miles north by 2 miles east of, 0.9 mile north by 0.9 mile east of Santa Fe Ry., on east side of road, in corner fence post; railroad spike marked "309"	309.29
Madera, 4 miles northeast of, at four corners, in telephone pole; railroad spike marked "303"	303.20

Primary leveling by L. F. Biggs in 1919

From Madera south along highways into Biola quadrangle

Madera, in front face of northeast corner of county courthouse; aluminum tablet stamped "274 B"	274.518
Madera, 50 feet southwest of intersection of West Yosemite and West Olive streets, west end of concrete culvert; chiseled square marked "U. S. 263"	263.39
T. 11 S., R. 17 E., southeast corner of sec. 26, 40 feet west of crossroads, north end of concrete culvert; chiseled square, marked "U. S. 259"	259.40
T. 11 S., R. 17 E., southeast corner of sec. 35, 40 feet west of crossroads, north end of concrete culvert; chiseled square marked "U. S. 250"	250.34
T. 12 S., R. 17 E., northeast corner of sec. 11, 30 feet southwest of crossroads, west end of concrete culvert; bronze tablet stamped "249 1919 B B 1"	249.481
T. 12 S., R. 17 E., northeast corner of sec. 10, at crossroads, south end of concrete culvert; chiseled square, marked "U. S. 242"	242.07
T. 12 S., R. 17 E., northeast corner of sec. 15, at T road west, south end of concrete culvert; chiseled square, marked "U. S. 240"	240.90
Lavina School, 1 mile east of, T. 12 S., R. 17 E., northeast corner of sec. 22, at T road west, south end of brick culvert; chiseled square, marked "U. S. 236"	236.05

From Biola quadrangle east along highways near southeast corner of Madera quadrangle

T. 12 S., R. 18 E., northwest corner of sec. 20, at T road east, in corner fence post painted "U. S. 253"; spike	253.22
T. 12 S., R. 18 E., northwest corner of sec. 21, at crossroads, in power pole painted "U. S. 260"; spike	260.21
T. 12 S., R. 18 E., southeast corner of sec. 16, at crossroads near church, in base of power pole painted "U. S. 267"; spike	267.80

From Lavina School west along highways into Bonita Ranch quadrangle

Lavina School, 1 mile east of, T. 12 S., R. 17 E., northeast corner of sec. 22, at T road west, south end of brick culvert; chiseled square, marked "U. S. 236"	236.05
Lavina School, in northeast corner of school yard, northeast corner of sec. 21, T. 12 S., R. 17 E., in concrete post; bronze tablet stamped "230 1919 B B 5"	230.646

Primary leveling by D. S. Birkett in 1913

From milepost 181 of Southern Pacific R. R. northwest of Madera along highways west into Bonita Ranch quadrangle

	Feet
Milepost 181, 15 feet south of, west side of track, at edge of highway; iron post stamped "270 B"	270.920
T. 11 S., R. 17 E., northwest corner of sec. 15, south side of road, 1.25 miles north by 3 miles west of Madera, in electric power pole marked "U. S. 249 B. M."; railroad spike	249.49

Primary leveling by L. D. Ryus in 1902 and Roscoe Reeves in 1915

From milepost 181 east along highways into Gregg quadrangle (leveled twice)

Madera, 3 miles northwest of, 15 feet south of and opposite milepost 181, west of side track, at edge of highway; iron post stamped "270 B" (Bull. 342, p. 17, +0.488)	270.920
Madera, 3 miles north of, 750 feet northeast of farmhouse, on northeast corner post of barnyard; railroad spike, marked "275"	275.14
Madera, 3 miles north of, in northeast corner of crossroads, 1.4 miles east of Southern Pacific R. R.; railroad spike, marked "278"	278.16
Madera, 3 miles north of, 2 miles east of Southern Pacific R. R., 500 feet west of second-class road south, in corner fence post, north side of road; railroad spike, marked "284"	284.24
Madera, 3 miles north by 1 mile east of, on first culvert of Atchison, Topeka & Santa Fe Ry., north of milepost 1022, west of track; aluminum tablet stamped "297"	297.499
Madera, 3 miles north by 2 miles east of, 0.9 mile north by 0.9 mile east of Santa Fe Ry., on east side of road, in corner fence post; railroad spike, marked "309"	309.29
Madera, 4 miles northeast of, at four corners, in telephone pole marked "303"; railroad spike	303.20

QUADRANGLE COMPRISING HELM AND FIFTEEN OTHER 7½′ QUADRANGLES

[Latitude 36° 30′–37°; longitude 120°–120° 30′]

FRESNO AND MADERA COUNTIES

Primary leveling by Corps of Engineers, U. S. Army, in San Joaquin Valley in 1913–14

	Feet
T. 15 S., R. 16 E., 90 feet northeast of southwest corner of SE. ¼ SW. ¼ sec. 32, about 3 miles southeast of Standard Oil Co.'s Mendota pumping station, 20 feet north of fourth post north of telephone milepost 110 on Standard Oil Co.'s Bakersfield to Mendota pipe line; iron post set in cement (U. S. C. E. b. m. 319)	185.380
T. 16 S., R. 17 E., about 2 miles southeast of San Joaquin, in fence corner, 2 feet southeast of southwest corner of sec. 6; iron post set in cement (U. S. C. E. b. m. 320)	179.33
T. 16 S., R. 17 E., 45 feet southwest of northeast corner of sec. 2, in fence corner, south side of McMullin-Coalinga road; iron post set in cement (U. S. C. E. b. m. 321)	191.289
T. 14 S., R. 17 E., 9 feet west of southeast corner of sec. 36, on fence line 2 feet west of east and west and south fence intersection; iron post set in cement (U. S. C. E. b. m. 327)	202.137
Tranquillity, 0.75 mile northeast of, north side of Jamesan grade, west bank of Fresno Slough, directly in front of San Joaquin Valley Farm Land Co.'s Tranquillity pump house; iron post set in cement (U. S. C. E. b. m. 328)	170.880

	Feet
Standard Oil Co.'s Mendota pumping station, 2.5 miles northwest of, 40 feet west of Standard Oil Co.'s telephone line, in a corner of north-south and east-west fence lines; iron post set in cement (U. S. C. E. b. m. 329)	168.160
T. 14 S., R. 14 E., 40 feet northeast of southwest corner of sec. 3, beside property-line stake (found leaning in 1919); iron post set in cement (U. S. C. E. b. m. 330)	226.31
Fresno Slough, 300 feet east of, directly in front of store at Whites Bridge, on north side of Whites Bridge road, between two small trees; iron post set in cement (U. S. C. E. b. m. 331)	167.330
Whites Bridge, about 3.5 miles east of, 60 feet north of telephone pole 87–15, 3 feet south of fence line, north side of Whites Bridge road; iron post set in cement (U. S. C. E. b. m. 332)	169.679
Jamesan, about 2.5 miles northeast of, north side of Whites Bridge road, 50 feet east of telephone pole 93–15; iron post set in cement (U. S. C. E. b. m. 333)	192.704
Kerman, 1 mile north of, at northeast corner of Whites Bridge road and Madera Ave., 5 feet east of Automobile Club of California's road sign; red metal disk set in cement (U. S. C. E. b. m. 334)	222.319
Biola, about 1.8 miles north and 0.6 mile east of, 1,650 feet north and 600 feet east of southwest corner of sec. 3, T. 13 S., R. 18 E., 65 feet south of south bank of river, on north and south fence line, on property of Clovis B. Hylton; iron post set in cement (U. S. C. E. b. m. 341)	235.1
Biola, 1.1 miles north and 0.4 mile west of, 550 feet north and 540 feet east of southwest corner of NW. ¼ sec. 9, T. 13 S., R. 18 E., 58 feet southeast of southeast corner of 3-story green tank house on property of H. E. Pickett, on south bank of river; iron post set in cement (U. S. C. E. b. m. 342)	231.03
T. 13 S., R. 18 E., about 2,800 feet north of southwest corner of sec. 8, 1 mile southeast of Skaggs bridge, on south side of river, 12 feet from bank, on east line of Thompson Ave., 110 feet east of southeast corner of A. Anderson's house; iron post set in cement (U. S. C. E. b. m. 343)	231.1
Skaggs Bridge, 156 feet north of northwest corner of, in west fence line of Madera Road, 140 feet north of north bank of river; iron post set in cement (U. S. C. E. b. m. 344)	228.542
Skaggs Bridge, 0.9 mile west of, 4,000 feet north and 1,700 feet east of southwest corner of sec. 12, T. 13 S., R. 17 E., in west fence line of Bethany Cemetery, 45 feet south of south bank of river; iron post set in cement (U. S. C. E. b. m. 345)	235 64
Skaggs Bridge, 2.1 miles west of, about 400 feet southeast of southeast bank of river, on north fence line of Riverside Ave., 4.5 feet east of fence line bearing north, 125 feet northwest of northwest corner of H. E. Van Horn's barn, about 500 feet east of southwest corner of NW. ¼ sec. 11, T. 13 S., R. 17 E.; iron post set in cement (U. S. C. E. b. m 346)	228.53
Skaggs Bridge, about 3.2 miles west of, on property fence line of James Gallagher and Oliver Meline, 105 feet south of south bank of river, 1,600 feet north of southwest corner of sec. 10, T. 13 S., R. 17 E.; iron post set in cement (U. S. C. E. b. m. 347)	213.47

	Feet
Skaggs Bridge, on property fence line between James Gallagher and Benjamin F. Graham, 226 feet south of angle in fence line and about 700 feet south of south river bank, about 200 feet south of northwest corner of sec. 17, T. 13 S., R. 17 E.; iron post set in cement (U. S. C. E. b. m. 348)	208.73
T. 13 S., R. 17 E., about 3,200 feet north and 1,500 feet east of southwest corner of sec. 17, about 1,500 feet southwest of Jones's place, on north embankment of section of proposed Enterprise Canal, about 70 feet east of a low slough or swamp formed by water from canal, about 600 feet south of south river bank, about 3,000 feet downstream and on opposite side of river from mouth of Miller & Lux Canal; iron post set in cement (U. S. C. E. b. m. 349)	208.81
T. 13 S., R. 17 E., 1,900 feet north and 1,900 feet east of southwest corner of sec. 18, about 2 miles northeast of Striven's place, 1 mile below Jones's place, at northwest corner of old abandoned homestead now used by cattlemen, 96 feet south of south river bank; iron post set in cement (U. S. C. E. b. m. 350)	200.690
Striven's place, about 0.9 mile north of, on east bank of abandoned Enterprise Canal, about 900 feet south of point where canal leaves river bank at small angle, on highest point on crown of canal bank, about 1,200 feet south and 1,800 feet west of northeast corner of sec. 24, T. 13 S., R. 16 E., about 1,800 feet southwest of abandoned Peterson place; iron post set in cement (U. S. C. E. b. m. 351)	205.95
Whites Bridge over Fresno slough, 3 miles east and 2 miles north of, 2,500 feet west and 550 feet south of northeast corner of sec. 36, T. 13 S., R. 15 E., at base of large black willow tree which is the most easterly one in a row of 13 about the same size, about 93 feet north of an old road, about 4,100 feet south of headgate of Lone Willow Slough, about 600 feet southeast of sharp bend in river to right; iron post set in cement (U. S. C. E. b. m. 357)	174.53
T. 13 S., R. 15 E., 3,000 feet northeast of southwest corner of sec. 26, 3 miles east of Mowrry house, at headgate of canal supplying Mowrry ranch, on levee 45 feet west of Center Bridge over headgate; iron post set in concrete (U. S. C. E. b. m. 358)	177.56
Mendota, 3.5 miles northeast of, about 2 miles east of Mowrry ranch, 450 feet southeast of fence, 400 feet northwest of edge of lake, 500 feet south of south bank of river, 1,350 feet north and 300 feet west of headgate at south end of Mowrry Lake, 1,200 feet west and 1,000 feet south of northeast corner of sec. 27, T. 13 S., R. 15 E.; iron post set in concrete (U. S. C. E. b. m. 359)	169.48
T. 13 S., R. 15 E., 1.25 miles east of Mowrry ranch buildings, 2.5 miles east of Miller & Lux (Mendota) dam, 2,500 feet north of irrigation canal supplying Mowrry ranch, 850 feet southwest of south river bank, 900 feet north and 1,200 feet west of southeast corner of sec. 21, 30 feet south of isolated clump of small trees; iron post set in concrete (U. S. C. E. b. m. 360)	167.10
T. 13 S., R. 15 E., 2,800 feet north and 900 feet west of southeast corner of sec. 20, 1,600 feet east of Mowrry ranch, 1 mile east of Miller & Lux Mendota dam, 200 feet west of point where canal abruptly leaves river bank, 80 feet south of river bank, 150 feet north of canal, 180 feet north of fence; iron post set in concrete (U. S. C. E. b. m. 361)	164.64

	Feet
T. 13 S., R. 15 E., 1,400 feet west and 2,500 feet north of southeast corner of sec. 19, 2.5 miles north of Mendota, 300 feet south of Mendota Dam, northwest corner of superintendent's residence; iron post set in concrete (U. S. C. E. b. m. 362)	165.75
T. 13 S., R. 16 E., about 1,200 feet south of northwest corner of sec. 25, about 1 mile east and 4 miles north of Jamesan, on west boundary of M. O. Zeigler place, 1.5 feet east of fence behind old shed, 100 feet west of dwelling, 550 feet south of river bank, about 1,200 feet south of northwest corner of sec. 25; iron post set in concrete (U. S. C. E. b. m. 352)	196.73
T. 13 S., R. 16 E., about 1,700 feet south and 1,200 feet west of northeast corner of sec. 27, 3.7 miles north of Jamesan, and about 1.25 miles southwest of Striven's place, in open field, on west bank of slough about 200 feet wide and 8 feet deep running north and south into large bend of river about midway of 2 parts of bend and about 750 feet north of old road running up river to Striven's place; iron post set in concrete	190.25
T. 13 S., R. 16 E., about 1,700 feet north and 1,600 feet west of southeast corner of sec. 28, about 3.5 miles north and 1 mile west of Jamesan, at west end of curve (2-mile chord) of river, about 150 feet west of slough and about 120 feet south of line of brush, about 1,360 feet east of artesian well, about 250 feet southeast of southeast river bank at bend, about 560 feet south of river bank at mouth of slough; iron post set in concrete (U. S. C. E. b. m. 354)	185.250
Jamesan, about 3 miles north and 2 miles west of, 700 feet north and 1,500 feet west of southeast corner of sec. 29, T. 13 S., R. 16 E., old road up river crossed three washes or sloughs, after crossing the third, which has row of willow brush 200 feet long on its east bank and is about 1,800 feet from brush line on west bank of river, the road turns, bench mark is south of old road 50 feet and 1,200 feet from said third slough, about 1,000 feet west of another slough bearing southerly, about 1,200 feet south of river-bottom bank and 1,700 feet south of river bank; iron post set in concrete (U. S. C. E. b. m. 355)	179.84
Jamesan, about 3 miles west and 3 miles north of, 550 feet north and 1,600 feet west of southeast corner of sec. 30, T. 13 S., R. 16 E., 2,200 feet south of south bank of river, it lies between road from Armadon place and a point where the south bank of a slough bends and approaches to within 100 feet of the road, 85 feet south of slough bank and 30 feet north of road; iron post set in concrete (U. S. C. E. b. m. 356)	180.06
Mendota, 3.5 miles north of, 1.25 miles north of Mendota dam, 0.75 mile northeast of Helm ranch, 500 feet northwest of west bank of river, at junction on levee of south side of river with north bank of canal where canal turns at angle of about 90 degrees, 1,500 feet west and 600 feet south of northeast corner of sec, 18, T. 13 S., R. 15 E.; iron post set in concrete (U. S. C. E. b. m. 363)	162.310
T. 13 S., R. 15 E., 2,400 feet south and 1,700 feet east of northwest corner of sec. 7, about 3.5 miles northeast of Helm ranch, about 1,500 feet northwest of old bee farm which is on east side of river, 415 feet north of bridge over canal at fence angle; iron post set in concrete (U. S. C. E. b. m. 364)	158.820

	Feet
T. 13 S., R. 14 E., 800 feet east and 25 feet south of northwest corner of sec. 12, 3 miles northwest of Helm ranch, 50 feet south of canal, 160 feet southeast of old well, at southeast fence corner of old abandoned homestead; iron post set in concrete (U. S. C. E. b. m. 365)	154.150
T. 13 S., R. 14 E., 1,500 feet south and 1,700 feet west of northeast corner of sec. 2, on west side of river, about 4,000 feet south of old Columbia ranch, about 0.75 mile north of an old abandoned homestead, and on east side of canal in curve where it turns west; iron post set in concrete (U. S. C. E. b. m. 366)	157.070
Firebaugh, about 1.5 miles southeast of, 200 feet west of west river bank, about 4,000 feet northwest of old Columbia ranch, at fence line 10 feet west of road, about 2,000 feet south of where river makes large angle, 2,400 feet north and 1,700 feet east of southwest corner of sec. 34, T. 12 S., R. 14 E., 40 feet east of fence line running approximately north and south; iron post set in concrete (U. S. C. E. b. m. 367)	151.560
Firebaugh, at northeast corner of barn, about 600 feet west of south end of south approach to Firebaugh Bridge, 2,400 feet south and 500 feet east of northwest corner of sec. 28, T. 12 S., R. 14 E.; iron post set in concrete (U. S. C. E. b. m. 368)	149.080
Firebaugh, about 1 mile north of, about 2 miles south of Pozo farm, west side of river, on west side of Pozo Canal where canal is close to river bank, 1,900 feet south and 1,500 feet west of northeast corner of sec. 20, T. 12 S., R. 14 E.; iron post set in concrete (U. S. C. E. b. m. 369)	145.160
T. 12 S., R. 14 E., 1,300 feet north and 2,400 feet east of southwest corner of sec. 8, about 2,000 feet south of Pozo farm, on west bank of river, between Pozo Canal and river and about 50 feet south of point where lateral leaves main canal and follows river; iron post set in concrete (U. S. C. E. b. m. 370)	142.450
T. 12 S., R. 14 E., about 2,000 feet south of where river turns, 50 feet north of north bank of Pozo Canal, about 125 feet south of south bank of river, about 1 mile south of Pozo warehouse, about 1 mile north of Pozo farm, between Pozo Canal and river, 1,800 feet north and 900 feet west of southeast corner of sec. 5; iron post set in concrete (U. S. C. E. b. m. 371)	141.020
T. 11 S., R. 14 E., 2,100 feet south and 2,600 feet west of northeast corner of sec. 32, about 2,000 feet north of Pozo warehouse, at angle in fence opposite headgate to canal (lateral), 200 feet west of main canal, 300 feet west of river bank; iron post set in concrete (U. S. C. E. b. m. 372)	138.860
T. 11 S., R. 14 E., 1,100 feet south and 2,200 feet west of northeast corner of sec. 30, south bank of slough, 650 feet west of Pozo Canal flume over slough, about 800 feet west of river bank, 1.5 miles northeast of Pozo warehouse, 1.5 miles southeast of Central ranch, 230 feet west of wooden bridge, in fence corner; iron post set in concrete (U. S. C. E. b. m. 373)	135.90
T. 11 S., R. 14 E., 300 feet south and 700 feet east of northwest corner of sec. 19, 0.75 mile east of Central ranch, in bend in river, 250 feet west of west bank, 150 feet west of west bank of Pozo Canal, on curve in fence line; iron post set in concrete (U. S. C. E. b. m. 374)	134.32

	Feet
T. 11 S., R. 13 E., 300 feet north and 2,400 feet west of southeast corner of sec. 12, 1 mile northeast of Central ranch, in south end of concrete headgate, flume, and bridge, 150 feet west of west bank of river; iron post set in concrete (U. S. C. E. b. m. 375)	134.750
T. 11 S., R. 13 E., 2,000 feet north and 100 feet west of southeast corner of sec. 2, about 2 miles north of Central ranch, 200 feet west of west bank of river, 3 feet south of northwest corner of house at Chinaman's camp, 100 feet west of main canal and 30 feet north of lateral; iron post set in concrete (U. S. C. E. b. m. 376)	130.020

MENDOTA QUADRANGLE

[Latitude 36° 45′–36° 52′ 30″; longitude 120° 15′–120° 22′ 30″]

FRESNO AND MADERA COUNTIES

Primary leveling by L. F. Biggs in 1919

From Gravelly Ford quadrangle west along highways near north border of Mendota quadrangle. (The part west of Aliso was leveled twice)

	Feet
T. 12 S., R. 16 E., about 0.5 mile southwest of northeast corner of sec. 30, 15 feet south of Aliso Mill triangulation station, on north one of three concrete watering troughs; chiseled point, chiseled "U. S. 181"	181.24
Aliso Mill triangulation station, 0.5 mile west of, on northwest corner of canal bridge; spike, painted "U. S. 181"	181.10
T. 12 S., R. 15 E., near northwest corner of sec. 26, 150 feet southeast of red tank and mill, at northwest corner of stock corral, under cottonwood tree, in concrete post; bronze tablet stamped "174 1919 B B 8"	174.685
Aliso triangulation station, 1 mile southeast of, 20 feet north of road; top of post, painted "U. S. 169"	170.04
Aliso triangulation station, 1,500 feet northeast of angle in road to northeast, 100 feet south of road, top of sand dune; iron post stamped "170 1919 B B 9"	170.391
Canal bridge, in railing; spike, painted "U. S. 165"	165.90
Firebaugh, 6.4 miles east of, south of road, at angle in road to west, in fence post painted "U. S. 157"; spike	157.60
Firebaugh, 5.4 miles east of, 20 feet west of gate leading to M. & L. Columbia ranch house, on south fence line, in concrete post; bronze tablet stamped "157 1919 B B 10"	157.534
Firebaugh, 4.7 miles east of, southeast corner of bridge over creek, in top of post, painted "U. S. 157"; nail	157.58

From Mendota north along highways near west border of Mendota quadrangle to San Joaquin River and into Firebaugh quadrangle

Mendota, 0.5 mile northwest of, in concrete base of semaphore 174; chiseled "U. S. 175"	174.76
Mendota, 1.8 miles north of, northeast corner of canal bridge; spike, painted "U. S. 163"	163.20
Mendota, 2.5 miles north of, 300 feet south of Mendota Dam, northwest corner of superintendent's residence; iron post stamped "U. S. E. D. 362 169.3" (U. S. E. D. elev.=169.35)	165.750

	Feet
M. & L. Helm ranch, 200 feet southeast of mess hall, in gate post, painted "U. S. 157"; spike	157.14
M. & L. Helm ranch, 0.75 mile northeast of, 500 feet west of river, east bank of canal; iron post stamped "U. S. E. D. 363 165.9" (U. S. E. D. elev.=165.91)	162.310

MONOCLINE RIDGE QUADRANGLE

[Latitude 36° 30′–36° 37′ 30″; longitude 120° 30′–120° 37′ 30″]

FRESNO COUNTY

Primary leveling by W. H. Monahan in 1908

From Levis quadrangle northwest along highways into Chaney quadrangle

	Feet
Ladd's ranch, 14.93 miles northwest of, 50 feet east of creek, 10 feet east of road leading from Cantua Creek to Chaney ranch; iron post stamped "Cal. 1908 495 G"	494.342
Ladd's ranch, 16.19 miles northwest of, 10 feet west of wagon road leading from Cantua Creek to Cheney's ranch; a bottle in ground with board sunk beside it, marked "438"	437.19
T. 15 S., R. 13 E., at corner of SW. ¼ sec. 35; iron post stamped "Cal. 1908 492 G"	491.224
Ladds' ranch, 18.28 miles northwest of, 10 feet east of wagon road leading from Cantua Creek to Cheney's ranch; a bottle in ground with board sunk beside it, marked "504"	503.42
Ladd's ranch, 19.21 miles northwest of, 10 feet west of wagon road leading from Cantua Creek north to Cheney's ranch, a bottle in ground with board sunk beside it; aluminum tag stamped "528"	527.68
Ladd's ranch, 20.11 miles northwest of, between wagon road and creek, 400 feet north of where road crosses creek; iron post stamped "Calif. 1908 555 G"	554.742
Ladd's ranch, 21.21 miles northwest of, 10 feet west of wagon road; a bottle in ground with board sunk beside it; aluminum tag stamped "579"	578.81
Ladd's ranch, 22.34 miles northwest of, 10 feet west of wagon road, in post 2 by 2 by 4 inches sunk in ground; aluminum tag stamped "572"	571.62
Ladd's ranch, 23.24 miles northwest of, on west side of wagon road leading north from Cantua Creek to Cheney's ranch, 100 feet south of where road crosses ravine; iron post stamped "Cal. 1908 584 G"	583.462
Ladd's ranch, 24.31 miles northwest of, 10 feet west of wagon road leading north from Cantua Creek to Cheney's ranch; a bottle in ground marked "560"	559.81

NO. 28 QUADRANGLE

[Latitude 36° 22′ 30″–36° 30′; longitude 120° 15′–120° 22′ 30″]

FRESNO COUNTY

Primary leveling by L. O. Newsome in 1923

East along north border of quadrangle into No. 29 quadrangle

	Feet
T. 16 S., Rs. 14 and 15 E., bronze tablet stamped "382 1919 B. B. 51." (Initial elevation checked by running between two bench marks, closure +0.022, distance 1 mile)	382.198

	Feet
T. 17 S., Rs. 14 and 15 E., 2.3 feet north of corner of secs. 1 and 6, 1 mile north of Half Way pump station; iron post stamped "N 1923 428"	428.528
T. 17 S., R. 15 E., 0.8 mile east of township corner, southeast corner of fence; nail in fence post, marked "U. S. U. E." (?)	395.29
T. 17 S., R. 15 E., 1.6 miles east of township corner, 40 feet east of road forks; nail in top of stake, marked "U. S. 364"	364.72
T. 17 S., R. 15 E., north quarter corner sec. 4, 500 feet southwest of red house, 20 feet south of fence corner, south side of road; tin washer in top of 4 by 4 inch corner post, marked "U. S. 345"	346.02
T. 17 S., R. 15 E., north corner secs. 3 and 4; iron post, marked "S. McKay L. S. section corner"	341.328
T. 17 S., R. 15 E., near north corner of secs. 2 and 3, 1,500 feet south of sheep camp; iron post, stamped "N 1923 328"	328.827
T. 17 S., R. 15 E., half a mile east of north corner of secs. 2 and 3, 30 feet east of road; tin washer in top of 2 by 4 inch post, marked "U. S. 313"	313.36
T. 17 S., R. 15 E., north corner of secs. 1 and 2; tin washer in top of 3 by 3 inch post, marked "U. S. 303"	303.31
T. 17 S., R. 15 E., north part of sec. 1; top of 4 by 4 inch post, marked "U. S. 298"	298.92
T. 17 S., Rs. 15 and 16 E., 1.9 feet north of corner of secs. 1 and 6, 40 feet southwest of angle in telephone line, 150 feet north of signpost at road forks; iron post, stamped "N 1923 289"	289.308

NO. 29 QUADRANGLE

[Latitude 36° 22′ 30″–36° 30′; longitude 120° 07′ 30″– 120° 15′]

FRESNO COUNTY

Primary leveling by L. F. Biggs in 1919

From San Joaquin quadrangle along highways southeast into Wheatville quadrangle

	Feet
Standard Oil town pump station, 1.4 miles northwest of, 50 feet north of fifth pole north of milepost 102; iron post, stamped "U. S. E. D. No. 318 Elev. 206.5" (U. S. E. D. elev. 206.50)	202.900
Standard Oil town pump station, at northeast corner of building, top of concrete window sill; chiseled square, marked "U. S. 210"	210.08

Primary leveling by L. O. Newsome in 1923

Along north border of quadrangle to point 1.4 miles northwest of Standard Oil town pump station

T. 17 S., R. 16 E., north corner of secs. 5 and 6, 15 feet east of fence corner; iron post stamped "N 1923 269 S. W. F. 1920"	269.834
T. 17 S., R. 16 E., north corner of secs. 4 and 5, 15 feet northwest of fence south; iron post stamped "N 1923 253 S. W. F. 1920"	253.379
T. 17 S., R. 16 E., 2.6 feet north of north corner of secs. 3 and 4, 800 feet south of windmill; iron post stamped "N 1923 234"	234.548
T. 17 S., R. 16 E., north corner of secs. 2 and 3; iron post stamped "S. W. F. 1920 N 1923 221"	221.094

	Feet
T. 17 S., R. 16 E., north corner of secs. 1 and 2; iron post stamped "S. W. F. 1920 N 1923 210"	210.282
T. 17 S., Rs. 16 and 17 E., corner of secs. 1 and 6; iron post stamped "S. W. F. 1920 N 1923 206"	206.982
Standard Oil town pump station, 1.4 miles northwest of, 50 feet north of fifth pole north of milepost 102; iron post stamped "U. S. E. D. No. 318 Elev. 206.5"	202.900

ORTIGALITA QUADRANGLE

[Latitude 36° 52′ 30″–37°; longitude 120° 52′ 30″–121°]

MERCED COUNTY

Primary leveling by L. F. Biggs in 1919

From Valley pump station along highways southwest 3.0 miles, thence south into Arburna quadrangle (leveled twice)

	Feet
Valley pump station No. 5, 0.5 mile southeast of, in base of telephone pole 63–9 painted "U. S. 244"; spike	244.21
Valley pump station No. 5, 1 mile southwest of, south of road, in base of fence post painted "U. S. 475"; spike	475.25
Valley pump station No. 5, 2.5 miles southwest of, 60 feet southeast of Y road, 500 feet east of crossroads, top of 1 by 6 inch board painted "U. S. 558"; nail and washer	557.88
Valley pump station No. 5, 3 miles southwest of, 40 feet south of road, on brow of hill, in boulder; bronze tablet stamped "586 111 1919 BB 586"	586.038
Artigue ranch house, 200 feet northeast of, in northwest corner of bridge, painted "U. S. 495"; spike	494.76
Artigue ranch house, 0.9 mile southwest of, near gate, in fence post, painted "U. S. 540"; spike	539.48
Artigue ranch house, 1.7 miles south of, 200 feet east of creek crossing, in fence post, painted "U. S. 582"; spike	582.04
Artigue ranch house, 2.7 miles south of, 200 feet east of road, near second-class road south, on point of hill; bronze tablet stamped "115 1919 B B 643"	643.371
Old Ortigalita School, 800 feet northeast of, 20 feet east of gate, on summit of boulder; chiseled mark, chiseled "U. S. 708"	707.94

From point 3 miles southwest of Valley pump station No. 5 along highways west to point near west border of quadrangle, thence south and east to Carrisalito Springs, thence northeast to beginning. (The central part of this circuit was leveled twice)

Valley pump station No. 5, 3 miles southwest of, 400 feet south of road at brow of hill, in boulder; tablet stamped "586 111 1919 B B"	586.038
Valley pump station No. 5, 4 miles southwest of, 0.1 mile east of old sheep camp, at crossroads; top of 1 by 6 inch board painted "U. S. 527"	526.94
Gaston Bide ranch house, 2.1 miles east of, 20 feet east of road at summit; top of rock chiseled "U. S. 621"	620.79
Gaston Bide ranch house, 1 mile east of, 10 feet south of road in saddle; on top of rock chiseled "U. S. 589"	588.58

	Feet
Gaston Bide ranch house, 250 feet north of house, north end of concrete watering trough; chiseled square, chiseled "U. S. 583"	583.61
Gaston Bide ranch house, 0.6 mile northwest of, in gatepost painted "U. S. 564"; spike	564.30
Gaston Bide ranch house, 250 feet north of house; top of trough	583.61
Carrisalito Springs, southeast of, in base of cottonwood tree scribed "U. S. 810"; spike	809.16
Ortigalita School, at southwest corner of yard, in post painted "U. S. 802"; spike	801.78
Ortigalita School, 0.3 mile north of, on north and south fence line, on top of flat boulder; bronze tablet stamped "837 1919 B B 112"	836.853
Ortigalita School, 0.7 mile north of, 60 feet south of gate, in fence post painted "U. S. 800"; spike	800.24
Ortigalita School, 1 mile northeast of, at old well, south end of concrete sheep trough; chiseled square, chiseled "U. S. 728"	728.12
Ortigalita School, 1.7 miles northeast of, 600 feet west of Y road to Arburna ranch, top of boulder; chiseled square marked "U. S. 691"	690.85

From Quien Sabe quadrangle east along highways near north border of Ortigalita quadrangle to northwest corner of Charleston School quadrangle

Los Banos Canyon, north edge of stream, 0.5 mile east of west end; top of boulder painted "U. S. 376"	375.51
Los Banos Canyon, 1.2 miles west of, end of wagon road, on south bank and 40 feet above bed of creek, at rocky point, south edge of trail; top of rock, chiseled "U. S. 379"	377.80
Mouth of Los Banos Canyon, 4.5 miles west of, 60 feet north of creek, 500 feet west of old cabin, top of boulder; bronze tablet stamped "115 1919 B B 321"	319.758
Mouth of Los Banos Canyon, 3.5 miles west of, 200 feet west of old building, in base of willow tree scribed "U. S. 295"; nail	293.85
Mouth of Los Banos Canyon, 2.5 miles west of, 20 feet north of road, in root of 18-inch sycamore tree scribed "U. S. 265"; nail	264.42
Mouth of Los Banos Canyon, 1.5 miles west of, 50 feet south of windmill, in base of 24-inch cottonwood tree scribed "U. S. 236"; spike	234.61
Los Banos Creek, 0.5 mile south of, 50 feet south of Valley pipe-line crossing, west of road, 10 feet north of south one of two gates, in fence post painted "U. S. 234"; spike	234.52

From Valley pipe line east along highway to point 3.5 miles northwest of Charleston School (leveled twice)

Los Banos Creek, 0.7 mile south of, 600 feet west of Valley pipe line, west side of road, in fence corner, in concrete post; bronze tablet stamped "307 39 1919 B B"	307.152
T. 11 S., R. 10 E., north side of sec. 8, east bank of dry canal; top of 2 by 4 inch redwood stake scribed "U. S. 210"	210.01
T. 11 S., R. 10 E., northeast corner of sec. 8, 10 feet west of main road, 40 feet southwest of second-class crossroads, 200 feet southwest of old mill, in concrete post; bronze tablet stamped "194 1919 B B 37"	193.620

OXALIS QUADRANGLE

[Latitude 36° 52′ 30″–37°; longitude 120° 30′–120° 37′ 30″]

FRESNO COUNTY

Primary leveling by L. F. Biggs in 1919

From Wisdom Well quadrangle north along highways near east border of Oxalis quadrangle to point near its center, thence northwest to northeast corner of Dos Palos quadrangle (the last part leveled twice)

	Feet
Firebaugh, 5 miles northwest of, in base of telephone pole 69–2, painted "U. S. 156"; spike	156.89
Oxalis triangulation station, 5 miles northwest of Firebaugh, 0.4 mile west of pipe and telephone line, 0.7 mile south of canal crossing opposite telephone pole 69–1; iron post stamped "161 B B 1919 21"	161.694
Silaxo, 1.2 miles southwest of, northwest corner of bridge over canal, in top of 12 by 12 inch post; spike, painted "U. S. 157"	157.04
Silaxo, south edge of Southern Pacific R. R. right of way, in front of east end of pumping station, in concrete post; bronze tablet stamped "142 29 1919 B B"	142.971
Silaxo, 1 mile southeast of, south end of concrete highway culvert over canal; chiseled "U. S. 148"	148.07
Silaxo, 1 mile east by 1 mile north of, opposite T fence west, in fence post painted "U. S. 134"; spike	134.37
Silaxo, 1 mile east by 2 miles north of, at T road south, in gatepost painted "U. S. 132"; spike	132.67
Silaxo, 2 miles north of, 10 feet west of power pole 432, 30 feet east of T road north to M. & L. Silaxo farm, on north fence line, on concrete post; bronze tablet stamped "131 1919 B B 31"	131.351
Silaxo farmhouse, 0.1 mile north of, at T road west, in gate post painted "U. S. 130"; spike	130.23
Silaxo farmhouse, 1 mile west of, in gatepost, painted "U. S. 129"; spike	129.44
Silaxo farmhouse, 1.5 miles west of, at north corner of canal bridge; spike, painted "U. S. 129"	129.24
M. & L. Holland farmhouse, 1.5 miles east by 0.5 mile north of, 0.5 mile east of small eucalyptus grove, 200 feet west of canal bridge, 10 feet north of gate on fence line, on concrete post; bronze tablet stamped "132 1919 B B 32"	132.081
M. & L. Holland farmhouse, 1.6 miles northeast of, east bank of canal, at road east, in corner fence post painted "U. S. 126"; spike	126.69
M. & L. Holland farmhouse, 1.9 miles northeast of, south end of east concrete abutment of canal headgate; chiseled "U. S. 127"	127.17
Dos Palos, 4 miles east of, 1 mile south of, in floor of canal bridge, painted "U. S. 127"; spike	127.14
Dos Palos, 2.5 miles east by 0.5 mile south of, 400 feet northeast of I. W. Rider's farmhouse, 60 feet west of canal, at angle in road south, in north fence line, on concrete post; aluminum tablet stamped "119 B B 1919 33"	118.848
Dos Palos, 1.5 miles east by 0.5 mile south of, 100 feet northeast of crossroads, in base of 18-inch cottonwood tree scribed "U. S. 118"; spike	117.85

	Feet
Dos Palos, 0.5 mile east by 0.5 mile south of, 40 feet southwest of crossroads, in corner fence post painted "U. S. 116"; spike	116.52

PANOCHE QUADRANGLE

[Latitude 36° 30′–37°; longitude 120° 30′–121°]

FRESNO, MERCED, AND SAN BENITO COUNTIES

Primary leveling by W. H. Monahan in 1908

From point about 13 miles southeast of Hayes to Jamison ranch, about 8 miles southwest of Los Banos

	Feet
Ladd's ranch, 14.9 miles northwest of, 50 feet east of creek, 10 feet east of road leading from Cantua Creek to Chaney ranch; iron post stamped "495 Cal 1908 G"	494.342
T. 15 S., R. 13 E., at corner of SW. ¼ sec. 35; iron post stamped "492 Cal 1908 G"	491.224
Ladd's ranch, 20.1 miles northwest of, between wagon road and creek, 400 feet north of point where road crosses creek; iron post stamped "555 Cal 1908 G"	554.742
Ladd's ranch, 23.2 miles northwest of, west of wagon road leading north from Cantua Creek to Chaney ranch, 100 feet south of point where road crosses ravine; iron post stamped "584 Cal 1908 G"	583.462
Hayes, on road leading from Mendota and Fresno to mouth of Panoche Canyon, 95 feet north of Hayes store, 60 feet south of road, under red gum tree; iron post stamped "503 Cal 1908 G"	502.143
Hayes, 3.9 miles northwest of, near base of foothills, 1 mile east of large canyon and 0.5 mile south of large swale; iron post stamped "616 Cal 1908 G"	615.921
Hayes, 7 miles northwest of, 10 feet west of road leading northwest from Hayes to Avery ranch; iron post stamped "529 Cal 1908 G"	528.944
Hayes, 11.1 miles northwest of, 2.5 miles south of Little Panoche Creek; iron post stamped "523 G Cal. 1908"	523.087
Little Panoche Creek, 45 feet north of north bank, 1.5 miles northeast of Avery ranch; iron post stamped "407 Cal 1909 G"	406.800
Little Panoche Creek, 3.4 miles northwest of, 10 feet west of wagon road leading north from Avery ranch, near base of foothills; iron post stamped "384 Cal 1909 G"	383.389
Little Panoche Creek, 6.4 miles northwest of, 15 feet west of wagon road, 1,650 feet south of old deserted building, 0.5 mile east of foothills; iron post stamped "341 Cal 1909 G"	340.744
Little Panoche Creek, 10 miles northwest of, at forks of road, 75 feet west of San Joaquin & Kings River Canal & Irrigation Co.'s projected canal; iron post stamped "150 Cal 1909 G"	149.960

POZO FARM QUADRANGLE

[Latitude 36° 52′ 30″–37°; longitude 120° 22′ 30″–122° 30′]

FRESNO AND MADERA COUNTIES

Primary leveling by L. F. Biggs in 1919

From Oxalis quadrangle east along highways to Pozo warehouse, thence north 2,000 feet

	Feet
Pozo warehouse, 1.5 miles west of, at angle in road south, in power pole 399 painted "U. S. 134"; spike	134.09

	Feet
Pozo warehouse, at northeast corner of, 15 feet southwest of high-power pole, west bank of San Joaquin River; iron post stamped "137 30 1919 B B"	137.874
Pozo warehouse, 2,000 feet north of, 200 feet west of canal, on fence line; iron post stamped "U. S. E. D. Elev. 142.5 No. 372"	138.860

Primary leveling by D. S. Burkett in 1913

From Kentucky Well quadrangle west along highways near north border of Pozo Farm quadrangle and north into Bliss Ranch quadrangle

T. 11 S., R. 14 E., southwest corner of sec. 1 (southwest corner of block 1, Chowchilla subdivision No. 3); top of corner post	146.27
T. 11 S., R. 14 E., 100 feet west by 75 feet south of quarter corner between secs. 2 and 11 (quarter corner between blocks 2 and 11, Chowchilla subdivision No. 3), on north and south fence, 20 feet north of gate, in fence post marked "U. S. 145 B. M."; railroad spike	146.03
T. 11 S., R. 14 E., 33 feet east by 33 feet south of northwest corner of sec. 10 (southwest corner of block 3, Chowchilla Subdivision No. 3); iron post stamped "1913 138"	138.565

PRIEST VALLEY QUADRANGLE

[Latitude 36°–36° 30′; longitude 120° 30′–121°]

FRESNO, MONTEREY, AND SAN BENITO COUNTIES

Primary leveling by W. H. Monahan in 1908

From point 2.6 miles southeast of San Lucas southeast along railroad to point 3 miles southeast of San Ardo

	Feet
San Lucas, 3.6 miles southeast of, on west side of track; iron post stamped "408–B"	406.908
San Lucas, 6.6 miles southeast of, west of railroad, 100 feet south of road crossing; iron post stamped "1908 Cal 429 B" C. & G. S., 1920	428.825
San Lucas, 7.5 miles southeast of, west of railroad, 100 feet north of block signal 1805, in telegraph pole; spike with aluminum tag stamped "403"	402.75
San Lucas, 8.6 miles southeast of, west of railroad, in telegraph pole; spike with aluminum tag stamped "419"	418.39
San Ardo, in front of station; top of rail, marked "458"	458.0
San Ardo, 0.1 mile southeast of, east of railroad, 1,000 feet south of water tank, in base of target 1833; aluminum tablet stamped "1908 Cal 459 B" (not found 1917)	459.81
San Ardo, 1.3 miles southeast of, east of railroad, in telegraph pole; spike with aluminum tag stamped "445"	444.295

From point 10 miles northeast of King City along highway east to Lonoak, thence southeast via Priest Valley to Crump's ranch, thence northeast 3.7 miles

King City, 12.7 miles southeast of, south of road, at ranch house, in gatepost leading to straw yard; spike with aluminum tag stamped "820"	822.78
Lonoak, 0.8 mile north of, north of road, in telegraph pole; spike with aluminum tag stamped "925"	927.43

	Feet
Lonoak, 1.6 miles north of, south of road, 500 feet west of Andrew Hopkins's residence, 400 feet west of where road crosses creek, in telegraph pole; spike with aluminum tag stamped "945"	947.38
Lonoak, 2.3 miles north of, southeast corner of road intersection, 800 feet north of schoolhouse; iron post stamped "1908 Cal 1027"	1,029.834
King City, 17.1 miles east of, north of road, west of Pet Bengard's ranch dwelling, 5 feet south of creek, in telephone pole; spike with aluminum tag stamped "1029"	1,028.74
King City, 18.5 miles east of, south bank of Lewis Creek, 500 feet west of Pet Bengard's ranch house, in telegraph pole; spike with aluminum tag stamped "1107"	1,107.30
King City, 20.97 miles east of, north of road, on bank of Lewis Creek, 25 feet north of where road crosses creek, 500 feet north of Ernest Bengard's residence, in telephone pole; spike with aluminum tag stamped "1300"	1,299.66
Lonoak, 9.4 miles southeast of, 22.8 miles east of King City, east of road, on fence line of the C. O. T. Co.'s pump station No. 4; iron post stamped "1908 Cal 1404 B"	1,404.467
King City, 23.6 miles southeast of, south of road, 500 feet east of Miller & Lux goat ranch, 25 feet south of Lewis Creek, at angle in road, in telephone pole; spike with aluminum tag stamped "1455"	1,454.57
King City, 24.7 miles southeast of, 100 feet north of where road crosses creek, in leaning cottonwood tree; spike with aluminum tag stamped "1518"	1,517.65
King City, 25.6 miles southeast of, north of road, 10 feet south of Lewis Creek, 600 feet south of schoolhouse, in telephone pole; spike with aluminum tag stamped "1580"	1,579.92
King City, 26.8 miles southeast of, on south side of road, 50 feet north of Lewis Creek, 200 feet west of where road crosses creek, in large pine tree; spike with aluminum tag stamped "1669"	1,669.04
King City, 27.7 miles southeast of, across creek in San Benito County, on James Bengard's ranch, 50 feet west of creek, in telephone pole; spike with aluminum tag stamped "1725"	1,724.68
Lonoak, 15.3 miles southeast of, on Bengard ranch, in front of residence beside fence, 20 feet north of barnyard gate; iron post stamped "1908 Cal 1766"	1,765.832
Bengard ranch, 100 feet east of, north of road, in telephone pole; spike with aluminum tags stamped "1843"	1,842.79
Bengard ranch, 2.4 miles east of, north of road, 150 feet east of where road crosses Lewis Creek and enters big cut, in leaning cottonwood tree; spike with aluminum tag stamped "1944"	1,944.07
Bengard ranch, 3.1 miles east of, north of road, 50 feet north of angle in road, 150 feet north of Lewis Creek, in telephone pole; spike with aluminum tag stamped "1988"	1,987.91
Bengard ranch, 5.1 miles southeast of, south of road, 1,000 feet south of white ranch house, 100 feet north of Lewis Creek, where road crosses creek; iron post stamped "1908 Cal 2198"	2,197.909
Bengard ranch, 6.2 miles southeast of, north of road, 500 feet south of Griffin residence, in telephone pole; spike with aluminum tag stamped "2254"	2,254.44
Bengard ranch, 7.4 miles southeast of, north of road, 0.5 mile southeast of Palmer Bros.' store, in telephone pole; spike with aluminum tag stamped "2327"	2,327.56

	Feet
Bengard ranch, 8.1 miles southeast of, north of road, 200 feet east of gate leading to ranch with white house, in telephone pole; spike with aluminum tag stamped "2372"	2,372.51
Bengard ranch, 9.5 miles southeast of, 300 feet north of Maren's ranch house, in telephone pole; spike with aluminum tag stamped "2490"	2,490.36
Bengard ranch, 10.1 miles southeast of, 20 feet north of road, on summit of divide, in base of large oak tree; spike with aluminum tag stamped "2580"	2,579.95
Bengard ranch, 11.3 miles southeast of, north of road under large cottonwood tree; iron post stamped "1908 Cal 2057"	2,057.142
Bengard ranch, 12.1 miles southeast of, north of road, 0.8 mile north of C. O. T. Oil Co.'s pumping station, in pine tree; spike with aluminum tag stamped "1968"	1,968.27
C. O. T. Oil Co.'s pumping station, 0.25 mile southeast of, in telephone pole on north bank of creek, 100 feet north of road; spike with aluminum tag stamped "1863"	1,863.41
C. O. T. Oil Co.'s pumping station, 1 mile southeast of, north of road, in telephone pole; spike with aluminum tag stamped "1794"	1,794.08
C. O. T. Oil Co.'s pumping station, 2.2 miles southeast of, north of road, 20 feet north of creek, in cottonwood tree; spike with aluminum tag stamped "1681"	1,681.01
C. O. T. Oil Co.'s pumping station, 2.6 miles southeast of, south of road under cottonwood tree, 300 feet west of where road crosses creek; iron post stamped "1908 Cal 1661 B"	1,660.88
C. O. T. Oil Co.'s pumping station, 3.96 miles east of, north of road, 100 feet west of gulch, in telephone pole; spike with aluminum tag stamped "1603"	1,603.41
C. O. T. Oil Co.'s pumping station, 4.7 miles east of, north of road, 50 feet north of creek where pipe line crosses creek, in telephone pole; spike with aluminum tag stamped "1528"	1,527.85
C. O. T. Oil Co.'s pumping station, 5.9 miles east of, north of road, 100 feet south of Bennett's ranch house, in telephone pole; spike with aluminum tag stamped "1458"	1,458.10
Crump's ranch, east of road, under oak tree, 25 feet east of entrance to dwellings; iron post stamped "1460 B"	1,460.399
Crump's ranch, 0.8 mile east of, at forks of road, near post of sign "Fresno Hot Springs," in base of telephone pole; spike with aluminum tag stamped "1448"	1,448.52
Crump's ranch, 1.5 miles east of, northeast of road at angle to small gulch, in telephone pole; spike with aluminum tag stamped "1544"	1,544.82
Crump's ranch, 3.7 miles east of, north of road, 500 feet west of creek, in telephone pole; spike with aluminum tag stamped "1163"	1,163.81

Primary leveling by L. F. Biggs in 1917

From point near Lonoak north along highway near west border of quadrangle

Lonoak, 3.6 miles northwest of, west edge of road, in top of bridge upright, painted "U. S. B. M. 1,150"; copper nail	1,149.34
Lonoak, 4.7 miles northwest of, east edge of road, opposite old house, in base of telephone pole painted "U. S. B. M. 1,267"; spike	1,266.84

	Feet
Lonoak, 6 miles northwest of, east edge of road, 800 feet south of old house, in telephone pole; spike, painted "U. S. B. M. 1,378"	1,378.09
Lonoak, 6.5 miles northwest of, 2.8 miles southeast of Bitterwater pump station, east edge of road, opposite windmill at north corner of O'Connor's orchard; iron post stamped "1,412 1917 1"	1,411.316
Bitterwater pump station, 2.2 miles north of, north edge of road at T road south; iron post stamped "1,758 1917 2"	1,757.873

Precise leveling by the U. S. Coast and Geodetic Survey in 1919

Southeast along Southern Pacific R. R.

San Lucas, 1.7 miles southeast of, west head wall of concrete culvert 174 C, 5 meters west of center line of track, 1 meter below, railroad mileage 174.1; red metal disk (U. S. C. & G. S. b. m. A–23)	405.901
San Lucas, 4 miles southeast of, east head wall of highway concrete culvert, opposite railroad structure 176 B, 15 meters west of center line of track, 2 meters below, railroad mileage 176.4; red metal disk (U. S. C. & G. S. b. m. B–23)	402.322
San Lucas, 6.3 miles southeast of, east head wall of highway concrete culvert, 400 feet south of cattle guard 178 D, 15 meters west of center line of track, 3.5 meters below, railroad mileage 178.7; red metal disk (U. S. C. & G. S. b. m. C–23)	423.031
San Lucas, 6.6 miles southeast of, west of railroad, 100 feet south of road crossing, railroad mileage 179.2; U. S. G. S. aluminum bronze tablet stamped "1908 Cal 429 B" set on iron pipe (U. S. C. & G. S. b. m. D–23)	428.825
San Ardo, 1.7 miles southeast of, in base of block signal 1846, 3 meters west of center line of track, railroad mileage 184.6; on horizontal surface of masonry or metal; surface within an outlined square (U. S. C. & G. S. b. m. E–23)	441.617
San Ardo, 3.1 miles southeast of, east of track, in corner of culvert under railroad, railroad mileage 186; C. S. bronze tablet stamped (U. S. C. & G. S. b. m. F–23)	465.780

SAN JOAQUIN QUADRANGLE

[Latitude 36° 30′–36° 37′ 30″; longitude 120° 07′ 30″–120° 15′]

FRESNO COUNTY

Primary leveling by L. F. Biggs in 1919

From Englebrecht Farm quadrangle east along highways into Helm quadrangle (first half leveled twice)

	Feet
Tranquillity, 2.6 miles south by 0.5 mile east of, in floor of canal bridge, painted "U. S. 172"; nail	172.28
Red Bridge, 2 miles west of, at T road east, in northeast corner of culvert, painted "U. S. 172"; spike	171.93
San Joaquin, 3 miles west of, 300 feet southeast of Hans Hansen's farmhouse, at corner of fence, in concrete post; bronze tablet stamped "1919 B B 60 173"	172.380
San Joaquin, 2 miles west of, center of Red bridge; top of bolthead, painted "U. S. 180"	179.84

	Feet
San Joaquin, 1 mile west of, south of road, at T road south, in east end of corrugated-iron culvert, painted "U. S. 171"	171.17
San Joaquin Public School, north end of concrete step to east entrance to schoolhouse; chiseled square, marked "U. S. 175"	174.58
NOTE.—This schoolhouse was burned down since this bench mark was established, and bench mark probably is destroyed.	
San Joaquin Public School, at northeast corner of yard, in concrete post; bronze tablet stamped "173 1919 61 B B"	172.682

From Jamesan quadrangle south along highways near northwest corner of San Joaquin quadrangle

Tranquillity, 2 miles south of, at T road east, in fence corner, painted "U. S. 166" spike	166.63

From Englebrecht Farm quadrangle southeast across southwest part of San Joaquin quadrangle into No. 29 quadrangle

Mendota oil station, 6.3 miles southeast of, in base of telephone pole 109, painted "U. S. 188"; spike	188.28
Milepost 109, 0.7 mile south of, at quarter corner between secs. 8 and 9, top of 3 by 3 inch stake; painted "U. S. 198"	198.17
T. 16 S., R. 16 E., corner of secs. 8, 9, 16, and 17; top of 3 by 3 inch stake, scribed "U. S. 205"	205.40
Mendota oil station, 8.4 miles southeast of, 12 feet north of second telephone pole south of milepost 107, at slight angle eastward in pole line, in concrete post; bronze tablet stamped "197 54 1919 B B"	196.804
Town oil pump station, 5.2 miles northwest of, in base of milepost 106, painted "U. S. 196"; spike	195.94
Town oil pump station, 4.2 miles northwest of, fifth telephone pole north of road crossing, in base of milepost 105, painted "U. S. 195"; spike	194.76
Standard Oil Co.'s town pump station, 3.7 miles north of, 10 feet south of milepost 104, in concrete post; bronze tablet stamped "199 B B 1919 55"	198.799
Town oil pump station, 2.2 miles northwest of, in base of milepost 105 painted "U. S. 199"; spike	199.10

TIERRA LOMA SCHOOL QUADRANGLE

[Latitude 36° 37′ 30″–36° 45′; longitude 120° 37′ 30″–120° 45′]

FRESNO COUNTY

Primary leveling by L. F. Biggs in 1919

From Little Panoche quadrangle south along highways to Tierra Loma, thence southeast into Chaney Ranch quadrangle

	Feet
Tierra Loma School, 1.6 miles north of, in corner fence post painted "U. S. 346"; spike	346.12
Tierra Loma School, 1 mile north of, at Valley pipe line crossing, in telephone pole painted "U. S. 363"; spike	363.27
Tierra Loma School, 60 feet east of west edge of road, on fence line, in concrete post; bronze tablet stamped "394"	394.780

	Feet
Tierra Loma School, 1.4 miles southeast of, in telephone pole 41–23 scribed "U. S. 366"; spike	366.99
Tierra Loma School, 2.6 miles southeast of, in telephone pole 40–16 scribed "U. S. 381"; spike	381.78

Primary leveling by W. H. Monahan in 1908

From Hayes northwest along highways into Little Panoche quadrangle

Chaney ranch, 3.2 miles west of, 100 feet west of creek, in telephone pole scribed "U. S. 499"; spike	499.36
Hayes, on road leading from Mendota and Fresno to mouth of Big Panoche Canyon, 95 feet north of Hayes store, 60 feet south of road, under red-gum tree; iron post stamped "Cal. 1908 503 G"	502.143
Hayes store, 0.94 mile northwest of, 10 feet west of wagon road; a bottle in ground with board beside it, aluminum tag stamped "505"	504.22
Hayes store, 1.99 miles northwest of, 100 feet southwest of homesteader's cabin, on west side of wagon road, in post; aluminum tag stamped "526"	525.57
Hayes, 3.07 miles northwest of; a bottle in ground with board sunk beside it, aluminum tag stamped "599"	598.57
Hayes, 3.92 miles northwest of, near base of foothill, 1 mile east of large canyon, 0.50 mile south of large swale; iron post stamped "Cal. 1908 616 G" (reported disturbed, Frankhauser 1920)	615.921
Hayes, 4.97 miles northwest of, near base of foothill; a bottle sunk in ground with board sunk beside it, aluminum tag stamped "554"	554.14
Hayes, 6.08 miles northwest of; a bottle in ground with post sunk beside it, aluminum tag stamped "524"	524.14
Hayes, 6.99 miles northwest of, 10 feet west of wagon road leading northwest from Hayes to Avery ranch; iron post stamped "Cal. 1908 529 G" (reported disturbed, Kiger, 1920)	528.944
Hayes, 8.02 miles northwest of, on edge of swale, in wooden post 4 by 4 inches by 4 feet embedded in ground 2 feet; aluminum tag stamped "533"	532.90

TRANQUILLITY QUADRANGLE

[Latitude 36° 37′ 30″–36° 45′; longitude 120° 15′–120° 22′ 30″]

FRESNO COUNTY

Primary leveling by L. F. Biggs in 1919

From Jamesan quadrangle west along highways to Whites Bridge over Kings slough (leveled twice)

	Feet
Whites Bridge, 4.8 miles east of, in base of telephone pole 88–12 painted "U. S. 168"; spike	168.64
Whites Bridge, 3.8 miles east of, 60 feet east of telephone pole 87–15; iron post stamped "U. S. E. D. 332, Elev. 173.0" (U. S. E. D. elev.=173.05)	169.679
Whites Bridge, 2.8 miles east of, in base of telephone pole 86–14 painted "U. S. 165"; spike	164.92

	Feet
Whites Bridge, 1.8 miles east of, in base of telephone pole 85–13 painted "U. S. 164"; spike	164.10
Whites Bridge, 0.8 mile east of, at road north to Herman house triangulation station, in telephone pole 84–20 painted "U. S. 164"; spike	164.01
Whites Bridge, 300 feet east of, north side of road; U. S. E. D. iron post 331 (without cap), U. S. E. D. elev. reduced 0.05 foot for loss of cap is 170.93	167.330
Whites Bridge, top of southwest concrete pier; bronze tablet stamped "165 1919 B B 45"	164.932

From Whites Bridge west along highways into Tufts Ranch quadrangle

Whites Bridge, 1.2 miles west of, 2.5 miles southeast of Mendota, 50 feet west of T road north; top of 2-inch galvanized pipe set in concrete, stamped "169"	169.11
Whites Bridge, 1.7 miles west of, at telephone-line crossing, in base of telephone pole painted "U. S. 172"; spike	171.67

From Mendota southeast along highways to Whites Bridge

Mendota, 1 mile east of, at angle in road south, in base of power pole 81–35 painted "U. S. 169"; spike	168.84

From point 6 miles south of Mendota east along highways 3 miles to U. S. E. D. bench mark

Mendota, 6 miles south of, T. 14 S., R. 15 E., southwest corner of sec. 31, in concrete post; bronze tablet stamped "196 47 1919 B B"	196.512
Tps. 14 and 15 S., R. 15 E., corner of secs. 31, 32, 5, and 6, in fence post painted "U. S. 183"; spike	183.55
Tps. 14 and 15 S., R. 15 E., corner of secs. 32, 33, 4, and 5, at T fence south, in corner fence post painted "U. S. 173"; spike	173.17
Standard Oil Co.'s Mendota pump station, 2.5 miles northwest of, 40 feet west of pipe line, in fence corner; U. S. E. D. iron post 329 stamped "U. S. E. D. b. m. 329 (or 359?) Elev. 171.8" (U. S. E. D. elev.=171.76)	168.160

From Tufts Ranch quadrangle east along highways near south border of Tranquillity quadrangle 4 miles, thence south into Englebrecht Farm quadrangle

T. 15 S., R. 15 E., corner of secs. 7, 8, 17, and 18, in corner fence post painted "U. S. 191"; spike	191.41
T. 15 S., R. 15 E., corner of secs. 8, 9, 17, and 16, south edge of road; top of 4 by 4 inch stake painted "U. S. 179"	178.56
T. 15 S., R. 15 E., corner of secs. 9, 10, 16, and 15, in corner fence post painted "U. S. 171"; spike	170.88
T. 15 S., R. 15 E., corner of secs. 10, 11, 4, and 15, 800 feet west of Standard Oil Co.'s Mendota pump station, in fence corner, in concrete post; bronze tablet stamped "167 54 1919 B B"	167.465

TUFTS RANCH QUADRANGLE

[Latitude 36° 37′ 30″–36° 45′; longitude 120° 22′ 30″–120° 30′]

FRESNO COUNTY

Primary leveling by L. F. Biggs in 1919

From Mendota south along highways near east border of quadrangle into Levis quadrangle

	Feet
Mendota, 1.5 miles south by 0.5 mile west of, west side of road, in base of power pole 253 painted "U. S. 183"; spike	183.03
Whites Bridge, 3 miles west of, 2.5 miles southwest of Mendota, opposite substation and T road west, on top of west end of concrete culvert; chiseled square, marked "U. S. 185"	184.98
T. 14 S., R. 15 E., northwest corner of sec. 18, 2.5 miles southwest of Mendota, at northwest corner of substation, opposite T road west, in concrete post; bronze tablet stamped "184 1919 B B 46"	184.406
Mendota, 3 miles south of, west side of road, in fence post painted "U. S. 189"; spike	189.56
Mendota, 4 miles south of, west of road, in corner fence post scribed "U. S. 194"; spike	194.10
Mendota, 5 miles south of, east of road, in fence post painted "U. S. 194"; spike	194.44
Mendota, 6 miles south of, T. 14 S., R. 15 E., southwest corner of sec. 31, east edge of road, 6 feet north of fence corner, in concrete post; bronze tablet stamped "196 47 1919 B B"	196.512
Mendota, 7 miles south of, 300 feet west of road, in base of old windmill tower painted "U. S. 198"; spike	198.53
Mendota, 8 miles south of, west of road, opposite T road east to Tranquillity, in corner fence post painted "U. S. 200"; spike	200.35

From Telephone ranch in Chaney Ranch quadrangle southeast along highways near west border of Tufts Ranch quadrangle into Levis quadrangle

M. & L. Telephone ranch, 0.6 mile south of, in telephone pole painted "U. S. 318"; spike	318.04
M. & L. Telephone ranch, 1.8 miles south of, 1,000 feet north of crossroads, 20 feet west of road, top of 2 by 4 inch redwood stake scribed "U. S. 317"	316.87
M. & L. Telephone ranch, 2 miles south of, 40 feet northwest of crossroads, in concrete post; bronze tablet stamped "74 1919 B B 319"	319.444
M. & L. Telephone ranch, 4.4 miles south of, 0.5 mile east of water tank, 30 feet west of road, top of 2 by 4 inch redwood stake scribed "U. S. 337"	336.70

From Mendota west along highways near north border of quadrangle

Tps. 13 and 14 S., R. 14 E., corner of secs. 35, 36, 1, and 2, 40 feet southeast of crossroads; corner fence post painted "U. S. 188" t. b. m	188.16
Tps. 13 and 14 S., R. 14 E., 30 feet west of corner of secs. 34, 35, 2, and 3, in gatepost painted "U. S. 202"; spike	201.50
Tps. 13 and 14 S., R. 14 E., corner of secs. 33, 34, 3, and 4, in gatepost painted "U. S. 214"; spike	213.54
T. 14 S., R. 14 E., 35 feet north of southwest corner of sec. 3; iron post stamped "U. S. E. D. 330 2301" (bench mark leaning, disturbed)	226.31

	Feet
T. 14 S., R. 14 E., 400 feet east of northwest corner of sec. 4, at T fence north, in fence post painted "U. S. 226"; spike (reported destroyed, Kiger, 1920)	226.15
Tps. 13 and 14 S., R. 14 E., 6 feet south of fence corner, at corner of secs. 31, 32, 5, and 6, on concrete post; aluminum tablet stamped "246 1919 B B 67"	246.110
Tps. 13 and 14 S., Rs. 13 and 14 E.; top of 4-inch pipe filled with concrete and set flush with ground, marked "U. S. 256" on 4 by 4 inch redwood stake	256.49

TUMEY HILLS QUADRANGLE

[Latitude 36° 30′–36° 37′ 30″; longitude 120° 37′ 30″–120° 45′]

FRESNO AND SAN BENITO COUNTIES

Primary leveling by R. A. Kiger in 1921

From Hayes via Panoche and Silver creeks to point 5.2 miles southwest of Hayes (checked spur line)

	Feet
Hayes, on road from Mendota and Fresno to mouth of Panoche Creek, 90 feet north of Hayes store; iron post stamped "502 Cal. 1918" (Bull. 481, p. 84)	502.143
Griffin Development Co.'s construction camp, at mouth of Panoche Canyon, in southeast wooden wing wall of wagon bridge over irrigation ditch; head of nail	538.10
Griffin Development Co.'s diversion dam, on top of south wing wall; painted square	572.90
Hayes, 2.2 miles southwest of, in southeast corner of concrete headgate of Griffin Development Co.'s diversion dam on Panoche Creek; aluminum tablet stamped "577 1921"	576.791
Griffin Development Co.'s diversion dam, 1.1 miles southwest of, on rock at junction of Panoche and Silver creeks; paint mark	599.68
Junction of Panoche and Silver creeks, 1.4 miles southwest of, 130 feet southeast of large cottonwood tree, on large boulder; paint mark	653.26
Junction of roads from Idria mine and Hollister to Mendota, 50 feet east of; top of iron pipe set in concrete	716.88
Hayes, 5.2 miles southwest of, at junction of roads from Hollister and Idria mine on Silver Creek, 110 feet south of small creek, on concrete post; aluminum tablet stamped "1921 717"	718.444

WHEATVILLE QUADRANGLE

Latitude 36° 22′ 30″–36° 30′; longitude 120°–120° 07′ 30″]

FRESNO COUNTY

Primary leveling by L. F. Biggs in 1919

From Helm quadrangle along highways south and west in northwest part of Wheatville quadrangle into No. 29 quadrangle

	Feet
Helm, 3 miles south of, T. 16 S., R. 18 E., at southwest corner of sec. 35, 75 feet northeast of T road north, in concrete post; bronze tablet stamped "196 1919 B B 16"	196.636
Helm, 3 miles south by 0.3 mile west of, southeast corner of canal bridge painted "U. S. 199"; nail	199.00

	Feet
Town, 1.9 miles east of, north end of canal bridge painted "U. S. 204"	204.45
Standard Oil Co.'s town pump station, at northeast corner of building, on top of concrete window sill; chiseled square, marked "U. S. 210"	210.08

Primary leveling by L. F. Biggs in 1919

From point 3 miles south of Helm east along highways into Burrel quadrangle

Helm, 3 miles south of, 75 feet northeast of T road north; concrete post No. 66	196.64
Tps. 16 and 17 S., R. 17 E., corner of secs. 1, 2, 35, and 36, in corner fence post painted "U. S. 194"; spike	194.86
T. 16 S., R. 17 E., southeast corner of sec. 36, north side of road, at T fence north; iron post stamped "U. S. E. D. 317 197.8" (U. S. E. D. elev.=197.84	194.497
Helm, 3 miles south by 3 miles east of, north of road, in fence post painted "U. S. 194"; spike	194.32
Fitzsimmons ranch, 100 feet east of Y road south, in gate post painted "U. S. 194"; spike	194.86

Primary leveling by H. S. Senseney and R. B. Steele in 1923

In northeast corner of quadrangle

T. 17 S., R. 18 E., 25 feet south of T road east, at corner of secs. 21, 22, 27, and 28; iron post stamped "26 S 1923"	205.441
Reference mark, 65 feet northeast of post, at northeast corner of T road east, in fence post; railroad spike	204.44
T. 17 S., R. 18 E., at northwest corner of crossroads, at corner of secs. 15, 16, 21, and 22, in top of 4 by 4 inch hub; copper nail and washer, marked "U. S. B. M. 199.8"	200.69
T. 17 S., R. 18 E., at southwest corner of T road south, at corner of secs. 9, 10, 15, and 16, in fence post; railroad spike, marked "U. S. B. M. 196.0"	196.95
T. 17 S., R. 18 E., about 0.2 mile east of corner of secs. 8, 9, 16, and 17, 7 feet east of fence corner at northeast corner of road forks; iron post stamped "27 S 1923"	198.516
Reference mark, 7 feet west of post, in fence post; railroad spike	197.67
T. 17 S., R. 18 E., SE. ¼ sec. 4, 0.7 mile south of bridge over Fresno slough, on west side of road at bend, in telegraph pole; railroad spike, not marked	197.39

In northeast corner of quadrangle (leveled twice)

Burrel, 1.2 miles south of, 1 mile southeast from highway concrete bridge over Fresno slough, in southeast angle of forks of slough, at angle east in levee, in base of willow tree; copper nail, painted "U. S. 206.0 B. M."	206.59
Burrel, 1 mile west of, 900 feet south of road, on west edge of levee, on east end of footbridge; copper nail, painted "U. S. 202.0 B. M."	202.64
P. B. M. Burrel, 1.1 miles west of, at Y road southwest, southwest corner of concrete bridge over Fresno slough; bronze tablet stamped "78–1919 B. B. 203"	203.304
Burrel, 300 feet northwest of depot, in crossing signboard, signed "U. S. 200"; railroad spike	200.090

WISDOM WELL QUADRANGLE

[Latitude 36° 45′–36° 52′ 30″; longitude 120° 30′–120° 37′ 30″]

FRESNO COUNTY

Primary leveling by L. F. Biggs in 1919

Along highway northwest across quadrangle near northeast corner of quadrangle

	Feet
Firebaugh, 3.5 miles northwest of, in base of telephone pole 71–1; spike, painted "U. S. 161"	161.52
Firebaugh, 4.3 miles northwest of, in base of telephone pole 70–1; spike, painted "U. S. 159"	159.68

From point 2.5 miles west of Firebaugh, in Firebaugh quadrangle, west and south along highways near east border of Wisdom Well quadrangle and into Chaney Ranch quadrangle

Tps. 12 and 13 S., R. 13 E., at end of T fence south, north corner of secs. 1 and 2, in concrete post; bronze tablet (?) stamped "69 1919 B B 182"	182.805
T. 13 S., R. 13 E., corner of secs. 1, 2, 11, and 12, in power pole painted "U. S. 194"; spike	194.48
T. 13 S., R. 13 E., corner of secs. 11, 12, 13, and 14, in base of power pole painted "U. S. 209"; spike	209.33
T. 13 S., R. 13 E., corner of secs. 13, 14, 23, and 24, 200 feet west of pump, at fence corner, at base of stake, in concrete post; bronze tablet stamped "1919 70 B B 223"	223.087
T. 13 S., R. 13 E, corner of secs. 23, 24, 25, and 26; top of 4 by 4 inch redwood stake, "U. S. 236" scribed on 1 by 6 inch redwood board	236.18
T. 13 S., R. 13 E., near quarter corner on north side of sec. 35, 20 feet west of road, in top of 1 by 6 inch redwood board; copper nail, scribed "U. S. 261"	261.02
T. 14 S., R. 13 E., NW. ¼ sec. 2, 400 feet south of second-class cross-roads, 30 feet west of road, in concrete post; bronze tablet stamped "275 1919 B B 68"	275.102

DEGREE QUADRANGLE 36°–37°, 121°–122°

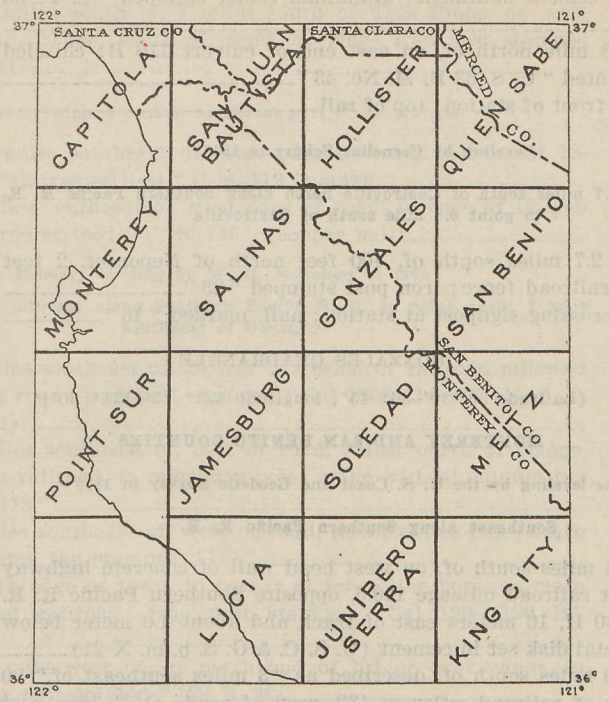


FIGURE 30.—Diagram of degree quadrangle 36°–37°, 121°–122°

CAPITOLA QUADRANGLE

[Latitude 36° 45′–37°; longitude 121° 45′–122°]

MONTEREY AND SANTA CRUZ COUNTIES

Primary leveling by B. A. Jenkins in 1908

From Watsonville northwest and west along Southern Pacific R. R. to Del Mar

	Feet
Watsonville, 20 feet east of mansion house, north side of street, opposite city square, in brick building; aluminum tablet stamped "S. F. 33 1908 20" (destroyed)	32.519
Endicott, 1.9 miles south of, in east end of culvert G 105; aluminum tablet stamped "S. F. 66 1909 21"	65.891
Aptos, 4.9 miles south of, 200 feet north of milepost 108, in west end of culvert; aluminum tablet stamped "S. F. 75 1908 22"	74.634
Aptos, 1 mile south of, east end of culvert 111 F; aluminum tablet stamped "S. F. 104 1908 23"	104.028
Aptos, 1,400 feet south of station, east of track, in south abutment of new steel bridge; aluminum tablet stamped "S. F. 99 1908 24"	98.333
Aptos, in front of station; top of rail	107.5

	Feet
Capitola, 0.5 mile south of, on east end of culvert 115; chiseled circle, painted "U. S. 88 B. M. No. 42"	87.75
Capitola, in front of station; top of rail	64.8
Capitola, 0.3 mile north of, east of track, north end of new steel bridge, in cement abutment; aluminum tablet stamped "S. F. 55 1908 25"	54.774
Capitola, 0.8 mile north of, on east end of culvert 116 B; chiseled circle, painted "U. S. 63 B. M. No. 43"	62.32
Del Mar, in front of station; top of rail	58.9

Leveling by Cornelius Schurr in 1911

From point 2.7 miles south of Castroville north along Southern Pacific R. R. to point 0.6 mile south of Castroville

Castroville, 2.7 miles south of, 400 feet north of Neponset, 2 feet inside of railroad fence; iron post stamped "23"	23.097
Nashua, in crossing signpost at station; nail, marked "15"	14.92

GONZALES QUADRANGLE

[Latitude 36° 30′–36° 45′; longitude 121° 15′–121° 30′]

MONTEREY AND SAN BENITO COUNTIES

Precise leveling by the U. S. Coast and Geodetic Survey in 1919

Southeast along Southern Pacific R. R.

	Feet
Chualar, 1.4 miles south of, on west head wall of concrete highway culvert, at railroad mileage 130.5, opposite Southern Pacific R. R. culvert 130 H, 16 meters east of track and about 1.0 meter below it; red metal disk set in cement (U. S. C. & G. S. b. m. X 21)	107.037
Chualar, 2.9 miles south of, described as "3 miles southeast of," 20 feet north of railroad milepost 132, west of road; G. S. iron post stamped "Cal. 1908 114 B," in fence line between railroad right of way and State highway, 15 meters east of main line track (present milepost 132 is on west side of track) (U. S. C. & G. S. b. m. Y 21)	114.196
Gonzales, 0.7 mile north of, at railroad mileage 134.4, 1 meter inside right of way fence at highway, 16 meters east of track and about 1.2 meters below it; bottom of hole in cement (U. S. C. & G. S. b. m. Z 21)	120.846
Gonzales, north edge of town, in corner of fence between main highway and railroad; G. S. iron post stamped "Cal. 1908 126 B" (U. S. C. & G. S. b. m. A 22)	125.502

Primary leveling by L. F. Biggs in 1917 with prism level

Along highways near northeast corner of quadrangle

Paicines, west edge of road, opposite T road east, in power pole; spike, painted "U. S. B. M. 675"	675.17
Tres Pinos, 4.6 miles south of, east edge of road, opposite road water tank, in base of large live-oak tree scribed "U. S. 642"; spike	641.73
Tres Pinos, 10.8 miles south of, 200 feet north of angle in road north, east edge of road, in base of large oak tree scribed "U. S. 831"; copper nail	831.47

	Feet
Tres Pinos, 10 miles south of, west edge of road, in front of A. F. Underwood ranch house; iron post stamped "769 1917 10"	768.814
Tres Pinos, 8.8 miles south of, east edge of road, in front of ranch house, in large white-oak tree scribed "U. S. 688"; copper nail	687.87
Paicines, 1.3 miles south of, 7 miles south of Tres Pinos, on west edge of road, 20 feet south of canal crossing; iron post stamped "701 1917 11"	701.481

From Paicines east in northeast part of quadrangle

Paicines, 1.2 miles southeast of, west edge of road, in base of 18-inch white-oak tree scribed "U. S. 712"; spike	711.90
Paicines, 2 miles southeast of, west edge of road, in base of 12-inch white-oak tree scribed "U. S. 745"; copper nail	745.34

Primary leveling by W. H. Monahan in 1908

From Chualar southeast along Southern Pacific R. R. to point about 1 mile southeast of Gonzales

Chualar, 3 miles southeast of, 20 feet northeast of railroad milepost 132, west of road; iron post stamped "Cal 1908 114 B" (U. S. C. & G. S. Y 21)	114.196
Chualar, 4 miles southeast of, east of road, 5 feet north of bridge, 50 feet from railroad, in telephone pole; spike with aluminum tag stamped "113"	113.09
Chualar, 5 miles southeast of, west of road, in telephone pole; spike with aluminum tag stamped "117"	117.24
Gonzales, north edge of town, in corner of fence line between main highway and railroad; iron post stamped "Cal 1908 126 B" (A 22)	125.502
Gonzales, 0.9 mile west of, at north end of bridge over canal, in floor; copper nail painted "128 B. M"	127.67

HOLLISTER QUADRANGLE

[Latitude 36° 45′–37°; longitude 121° 15′–121° 30′]

SAN BENITO AND SANTA CLARA COUNTIES

Primary leveling by L. F. Biggs in 1917 with yard rod

Northwest along highways to Pajaro River (leveled twice)

	Feet
Tres Pinos, 3.5 miles south of, east edge of road, in base of white oak tree scribed "U. S. 594"; spike	593.65
Tres Pinos, 2.7 miles south of, northwest concrete pier of steel bridge over Tres Pinos Creek; bronze tablet stamped "534 1917 12"	534.053
Tres Pinos, 1.6 miles south of, east edge of road, in base of large oak tree scribed "U. S. 511"; spike	511.23
Tres Pinos, 150 feet northwest of Southern Pacific depot, north end of concrete culvert 101 A; bronze tablet stamped "517 1917 13"	517.352
Tres Pinos, 1.2 miles northwest of, east edge of road, on concrete foundation of road water tank; chiseled "U. S. B. M. 519"	519.00
Tres Pinos, 2.3 miles northwest of, southeast concrete foundation of road windmill; chiseled square, aluminum tag on tank sill stamped "514"	513.65

	Feet
Tres Pinos, 3.4 miles northwest of, 4.1 miles southeast of Hollister, 300 feet west of railroad crossing, north edge of road, concrete foundation of road water tank; bronze tablet stamped "435 1917 14"	435.365
Hollister, 3 miles southeast of, at T road east, in base of water tank; copper nail, aluminum tag stamped "324"	323.77
Hollister, 1.6 miles southeast of, south edge of road, at T road south; top of concrete post chiseled "U. S. 313"	313.48
Hollister High School, south end of lower step of main entrance; bronze tablet stamped "1917 15 297"	297.011
Hollister, San Benito County courthouse, north end of steps at east entrance, in top of pillar; bronze tablet stamped "292 1917 16"	291.952
Hollister, 1.3 miles north of, at crossroad, in base of signboard; spike, aluminum tag stamped "259"	259.54
Hollister, 2.2 miles northwest of, 120 feet west of angle in road west and water tank; top of concrete culvert, chiseled "U. S. B. M."	247.87
Hollister, 3.3 miles northwest of, west edge of road, 20 feet north of road water tank; iron post stamped "233 1917 17"	233.583
Hollister, 4.9 miles northwest of, at T road west, in base of power pole painted "U. S. B. M. 196"; spike	196.66
Hollister, 5.9 miles northwest of, at angle in power line east, in base of power pole painted "U. S. B. M. 176"; spike	175.91
Hollister, 6.6 miles northwest of, 3 miles southeast of Fep, west edge of road, opposite abandoned ranch house; iron post stamped "168 1917 18"	168.388
Fep, 1.5 miles southeast of, east edge of road at T fence east, in top of white stake; copper nail, fence painted "U. S. B. M. 157"	157.30
Fep, 0.3 mile northwest of, 100 feet south of Pajaro River, west edge of road; iron post stamped "142 1917 19"	142.390
From point near northeast corner of quadrangle southwest along highways to Hollister	
Rancho Las Animas, 2.8 miles west of Stayton mine, south edge of road, in base of large oak tree, scribed "U. S. 2234"; nail	2,233.99
Rancho Las Animas, 0.6 mile west of, west edge of road in boulder; bronze tablet, stamped "2097 26 1917"	2,097.211
Rancho Las Animas, 1.3 miles west of, west edge of road, in front of Lone Tree School; summit of boulder, chiseled "U. S. 1833"	1,832.65
Lone Tree School, 0.6 mile west of, north side of road at summit, in fence post; spike, painted "U. S. 1888"	1,888.13
Lone Tree School, 1.8 miles southwest of, 0.3 mile southwest of abandoned house, 20 feet south of road at beginning of S turn; bronze tablet set in boulder, stamped "1420 1917 27"	1,419.795
Lone Tree School, 2.7 miles southwest of, east edge of road, in base of large oak tree, scribed "U. S. 1161"; nail	1,161.40
Lone Tree School, 4 miles southwest of, south side of road, opposite abandoned house; top of boulder chiseled "U. S. 742"	741.898
Lone Tree School, 5.1 miles southwest of, 6.8 miles northeast of Hollister, 500 feet west of bridge over Arroyo Dos Picuchas, north side of road, in summit of boulder; bronze tablet, stamped "479 28 1917"	478.630
Hollister, 5.7 miles northeast of, 30 feet north of road, at old ranch buildings, in base of oak tree scribed "U. S. 392"; nail	391.74

Feet

Hollister, 4 miles northeast of, west edge of road, at T road east to Lone Tree; iron post, stamped "280 1917 29"_____ 279.777

Hollister, 2.3 miles northeast of, on north end of concrete highway bridge; chiseled point, marked "U. S. B. M. 268"_____ 267.86

From point 4 miles northeast of Hollister north along highway to north boundary of quadrangle

Hollister, 5.3 miles north of, 250 feet north of T road east near Fairview School, south end of bridge; bolt painted "U. S. 253"_____ 252.91

Fairview School, 1.4 miles north of, west edge of road, in base of road tank foundation; copper nail, aluminum tag stamped "226"__ 225.93

Fairview School, 2.5 miles north of, north end of bridge; top of bolt painted "U. S. 228 B. M."_____ 228.29

Dunneville Corners, 1.3 miles southeast of, 0.2 mile west of Ausaymas School, at T road north; copper nail cemented in top of concrete water trough, painted "U. S. 208"_____ 208.22

Dunneville Corners, 6 miles north of Hollister, southeast intersection of crossroads; iron post, stamped "187 1 1917"_____ 187.172

Ausaymas School, 1 mile north of, west end of north concrete abutment of highway bridge; chiseled "U. S. 217"_____ 217.73

Ausaymas School, 2.2 miles north of, east edge of road, at base of Santa Clara-San Benito county-line post; iron post stamped "231 2 1917"_____ 230.784

Ausaymas School, 3 miles north of, 7.6 miles southwest of Bell station, 500 feet north of Hollister and Gilroy road forks, east edge of road, in base of 48-inch oak tree scribed "U. S. 245"; copper nail _____ 245.48

Bell station, 6.3 miles southwest of, east edge of road, in base of 48-inch oak scribed "U. S. 269"; spike (highway bench mark 19 marked "269.51")_____ 269.09

Bell station, 5.2 miles southwest of, south edge of road, in base of 42-inch oak tree scribed "U. S. 273"; spike (highway bench mark marked "273.35")_____ 272.87

JAMESBURG QUADRANGLE

[Latitude 36° 15′–36° 30′; longitude 121° 30′–121° 45′]

MONTEREY COUNTY

Leveling by L. F. Biggs in 1916–17

From northwest corner of quadrangle southeast along highway to Chew triangulation station

Feet

Del Monte ranch house, opposite west side of road, in base of oak tree scribed "U. S. 307"; spike, aluminum tag_____ 307.07

Del Monte ranch, 1.1 miles southeast of, east side of road, in root of 42-inch live-oak tree scribed "U. S. 382"; nail, aluminum tag____ 382.52

Del Monte ranch, 2.5 miles southeast of, 1,000 feet south of Whitlock's ranch house, 50 feet east of road, on large boulder; bronze tablet stamped "371 1 1916"_____ 370.695

Whitlock ranch house, 1.4 miles south of, west edge of road, in base of 42-inch live-oak tree scribed "U. S. 405; spike, aluminum tag__ 405.01

Jamesburg, 11.2 miles northwest of, 2.4 miles south of Whitlock's ranch house, east edge of road, in base of live-oak tree, scribed "U. S. 526"; nail, aluminum tag_____ 526.40

	Feet
Jamesburg, 10.3 miles northwest of, 60 feet west of road forks to Cachaqua, 10 feet south of road, at fence corner, in top of rock; bronze tablet stamped "626 2 1916"	625.685
Jamesburg, 9.6 miles northwest of, north side of road, opposite gate leading to Girard ranch house, in base of 42-inch white-oak tree scribed "U. S. 740"; spike, aluminum tag	740.55
Jamesburg, 8.3 miles northwest of, at Talarcitus's ranch house, east side of road, in large gatepost scribed "U. S. 873"; spike, aluminum tag	872.81
Jamesburg, 7.1 miles northwest of, east edge of road, in base of 36-inch white-oak tree scribed "U. S. 971"; spike, aluminum tag	971.14
Jamesburg, 5.4 miles northwest of, 1 mile north of Casa Verde Gun Club, 60 feet east of small corrugated iron culvert, east of road at fence line, in rock set flush with ground; bronze tablet stamped "1114 3 1916"	1,113.648
Jamesburg, 4.4 miles north of, west edge of road, opposite Casa Verde Gun Club, in root of 24-inch white-oak tree scribed "U. S. 1202"; nail, aluminum tag	1,202.15
Jamesburg, 3.4 miles north of, near top of long grade, west edge of road, in root of 30-inch white-oak tree scribed "1619"; spike, aluminum tag	1,619.41
Jamesburg, 2.7 miles north of, 1,000 feet north of ranch house, west edge of road at forks to Arroyo Seco and Jamesburg, in rock set flush with ground; bronze tablet stamped "1589 4 1916"	1,589.349
Jamesburg, 1.4 miles north of, 100 feet east of main-stream crossing, in root of 30-inch white-oak tree scribed "U. S. 1131"; nail	1,311.39
Jamesburg, 200 feet north of post office, under large oak tree, in boulder; bronze tablet stamped "1590 5 1916"	1,590.120
Jamesburg, 1 mile south of, north edge of road, 60 feet west of gate, in root of sycamore tree scribed "U. S. 1920"; nail	1,919.75
Jamesburg, 1.6 miles south of, south edge of road at point of ridge, in base of 36-inch white-oak tree scribed "U. S. 2330"; spike	2,329.99
Jamesburg, 2.3 miles south of, north edge of road, in base of 12-inch oak tree scribed "2802"; nail	2,802.88
Jamesburg, 3.0 miles south of, 50 feet west of road forks, in root of large oak tree scribed "U. S. 3153"; nail	3,153.73
Jamesburg, 4.0 miles south of, 15 feet west of large oak tree at gate leading from Frank Bruce's barnyard, in rock set flush with ground; bronze tablet stamped "3593 6 1917"	3,593.433
Jamesburg, 4.7 miles south of, 1.6 miles north of Chews Summit, east edge of road, in base of large oak tree scribed "U. S."; spike	3,986.39

Primary leveling by L. F. Biggs in 1917

From south border of quadrangle north along highways to point 4.7 miles south of Jamesburg

Tassajara Springs, 2.3 miles north of, south edge of road, in telephone pole with signboard "Lime Point"; copper nail, aluminum tag stamped "2943"	2,942.48
Tassajara Springs, 2.6 miles north of, west edge of road, at base of 24-inch live-oak tree scribed "U. S. 3141"; top of boulder	3,139.89
Tassajara Springs, 3.5 miles north of, west edge of road, in base of 18-inch white-oak tree scribed "U. S. 3872"; copper nail	3,871.88

	Feet
Tassajara Springs, 4.3 miles north of, north edge of road, in root of small live-oak tree bearing sign "Hotel Point"; copper nail, aluminum tag stamped "4353"	4,352.92
Tassajara Springs, 4.6 miles north of, 3.3 miles south of Chews Summit, east edge of road at first summit; aluminum tablet in boulder, stamped "4608 22 1917"	4,607.925
Chews Summit, 2.3 miles south of, east edge of road at point where trail leads to The Caves, in base of 12-inch pine tree scribed "4498 U. S.' ; copper nail	4,497.36
Chews Summit, 1.5 miles south of, in saddle at China Camp, 50 feet south of road, in root of 30-inch oak tree scribed "4324 U. S."; copper nail	4,323.20
Chews Summit, 20 feet east of gate, in root of 30-inch white-oak tree scribed "U. S. 4880"; nail	4,881.34
Chews triangulation station, in rock at base of signal; bronze tablet stamped "5059 1917 23"	5,060.057
Jamesburg, 5.7 miles south of, 0.6 mile north of Chews Summit, west edge of road, in root of 12-inch tan-oak tree scribed "U. S. 4544"; nail	4,545.06
Jamesburg, 5.2 miles south of, south edge of road; top of water trough	4,195.89
Jamesburg, 4.7 miles south of, 1.5 miles north of Chews Summit, east edge of road, in base of large oak tree scribed "U. S. 3986"; spike	3,986.39

JUNIPERO SERRA QUADRANGLE

[Latitude 36°–36° 15′; longitude 121° 15′–121° 30′]

MONTEREY COUNTY

Primary leveling by L. F. Biggs in 1917

From east border of quadrangle northwest along highways to west border of quadrangle (part of an unadjusted line closing +1.2 feet. See Lucia quadrangle)

	Feet
Jolon, 11.2 miles northwest of, north edge of road, 60 feet east of gate leading to Milpitas School; iron post stamped "1374 7 1917"	1,373.974
Jolon, 12.2 miles northwest of, 500 feet west of Mission Creek crossing, north side of road, on knot of large oak tree, scribed "U. S. 1300"; copper nail	1,299.87
Mission Creek crossing, 1.2 miles northwest of, at Y road to C. C. Avila's ranch, west side of road at forks, in root of 18-inch white-oak tree, scribed "1393 U. S."; copper nail	1,393.15
Mission Creek, 3 miles northwest of, 500 feet east of San Antonio River at road crossing, in base of 30-inch white-oak tree, scribed "U. S. 1171"; copper nail	1,171.71
Mission Creek, 4 miles northwest of, 30 feet north of road, 400 feet east of upper San Antonio crossing, in root of 24-inch oak tree, scribed "U. S. 1208"; copper nail	1,208.64
Mission Creek, 5 miles northwest of, 7.5 miles southeast of The Indians, 100 feet east of San Antonio River, at west end of new grade 40 feet north of road, on bench; iron post stamped "1268 1917 7"	1,268.070

POLITECHNIKA GDAŃSKA ZAKŁAD GEOLOGII

	Feet
The Indians, 6.4 miles southeast of, 200 feet west of a dry creek, 20 feet south of road, in base of 30-inch white-oak tree, scribed "U. S. 1317"; copper nail	1,317.02
The Indians, 5.4 miles southeast of, north edge of road, at Y road to F. Jones's ranch house, in root of 18-inch white-oak tree, scribed "U. S. 1299"; copper nail	1,299.42
The Indians, 4.3 miles southeast of, west edge of road, in root of 30-inch white-oak tree, scribed "U. S. 1522"; copper nail	1,522.67
The Indians, 3.6 miles southeast of, 40 feet south of Rattlesnake Creek, 30 feet south of road, in top of boulder; aluminum tablet stamped "1509 1917 8"	1,509.816
The Indians, 2.1 miles southeast of, west edge of road, at Y road to C. C. Avila's ranch, in base of 30-inch white-oak tree, scribed "U. S. 1573"; copper nail	1,573.89
The Indians, 1.4 miles southeast of, 300 feet west of Santa Lucia Creek, 40 feet north of road, in base of 42-inch white-oak tree, scribed "U. S. 1730"; copper nail	1,730.33
The Indians, 250 feet south of house, in top of flat sandstone ledge; aluminum tablet stamped "1857 9 1917"	1,857.563
The Indians, 500 feet north of house, 50 feet north of gate, west edge of stream, in root of sycamore tree scribed "U. S. 1908"; copper nail	1,908.29
The Indians, 1.2 miles northwest of, north edge of trail, in saddle, in root of 30-inch white-oak tree, scribed "U. S. 2265"; copper nail	2,265.61
The Indians, 2.3 miles northwest of, 60 feet north of Indian house, in root of 48-inch white-oak tree scribed "U. S. 2085"; copper nail	2,085.87
The Indians, 3 miles northwest of, 2.3 miles southeast of Rancho Escondido, east edge of trail; iron post stamped "2040 10 1917," tree blazed with triangle on west edge of trail	2,040.707
Rancho Escondido, 1 mile southeast of, south edge of trail, in root of 24-inch live-oak tree, scribed "U. S. 2014"; copper nail	2,014.73
Rancho Escondido, 50 feet east of trail at forest ranger camp, in root of 30-inch live-oak tree scribed "2148"; copper nail	2,148.80
Rancho Escondido, 1 mile northwest of, 100 feet west of Arroyo Seco crossing, north edge of trail, in large boulder; aluminum tablet stamped "1640 11 1917"	1,640.612

KING CITY QUADRANGLE

[Latitude 36°–36° 15′; longitude 121°–121° 15′]

MONTEREY COUNTY

Precise leveling by U. S. Coast and Geodetic Survey in 1919

Southeast along Southern Pacific R. R.

	Feet
King City, 4.7 miles north of, at southwest corner of cheese factory at Coburn, level with the ground, east of track, north of road crossing, in horizontal surface of concrete foundation; red metal disk (U. S. C. & G. S. b. m. O 22)	264.324
King City, 2.4 miles north of, on concrete base of intermediate block signal 1611, south of Elsa spur, 3.5 meters east of track and about 0.2 meter below it; red metal disk (U. S. C. & G. S. b. m. P 22)	295.859

	Feet
King City, northwest corner of Broadway and First St., in cement sidewalk, southeast of El Camino Real Hotel; U. S. G. S. aluminum bronze tablet stamped "335–B" (U. S. C. & G. S. b. m. R 22)	334.661
King City, southwest corner of Broadway and Third St., north side of First National Bank, in inside corner of cement sidewalk well against bank building; red metal disk (U. S. C. & G. S. b. m. S 22)	330.692
King City, 0.4 mile southeast of, railroad mileage 164.1, east end of north abutment of bridge 164–B, 2 meters east of center line of track and 0.1 meter below; surface within an outlined square on horizontal surface of masonry or metal (U. S. C. & G. S. b. m. T 22)	331.958
King City, 2.2 miles southeast of, railroad mileage 165.9, east head wall of concrete culvert 165 D, 3 meters east of center line of track and 0.1 meter below; red metal disk (U. S. C. & G. S. b. m. U 22)	313.398
King City, 3.2 miles southeast of, railroad mileage 166.9, 30 meters east of center line of track, 30 meters south of fence, 2 poles north of milepost 167; U. S. G. S. aluminum bronze cap riveted on iron pipe (U. S. C. & G. S. b. m. V 22)	320.662
King City, 4.8 miles southeast of, railroad mileage 168.5, east head wall of concrete culvert 168 B, 3 meters east of center line of track and 0.4 meter below; red metal disk (U. S. C. & G. S. b. m. W 22)	351.653
King City, 6.9 miles southeast of, 5 feet west of railroad, railroad mileage 170.9, at edge of concrete culvert; U. S. G. S. aluminum cap on iron post (U. S. C. & G. S. b. m. X 22)	393.497
King City, 7.9 miles southeast of, 5 meters west of center line of track and 1 meter below, railroad mileage 171.6, west head wall of concrete culvert 171 C; red metal disk (U. S. C. & G. S. b. m. Y 22)	387.443
San Lucas, north edge of town, 40 feet from center of railroad, 200 feet north of road crossing, railroad mileage 172.4, in fence corner; U. S. G. S. aluminum cap on iron post (U. S. C. & G. S. b. m. Z 22)	393.917

Primary leveling with yard rod by W. H. Monahan in 1908 and by L. F. Biggs in 1917

From King City northeast along highway 10 miles toward Lonoak (leveled twice)

NOTE.—A 1-yard error (not in computation) was corrected in Monahan's line near King City by Biggs's line, checked by a third running. Monahan's line east of point near Lonoak should be releveled to find a compensating error.

King City, 1 mile northeast of, north of road, in telephone pole; spike, with aluminum tag stamped "396"	395.63
King City, 2.1 miles northeast of, north of road, in telephone pole; spike, with aluminum tag stamped "465"	464.51
King City, 2.98 miles northeast of, north of road, at clump of trees on north, in telephone pole; spike, with aluminum tag stamped "483"	482.72

	Feet
King City, 4 miles northeast of, south of road, 1,000 feet east of old barn at curve in road, in telephone pole; spike, with aluminum tag stamped "563"	562.52
King City, 5 miles northeast of, east of road, 1,000 feet east of white wire gate to ranch house in valley; iron post, stamped "1908 California 667 B"	666.099
King City, 7.1 miles northeast of, west of summit of range, in fence post on south side of road; spike, with aluminum tag stamped "959"	961.78
King City, 7.4 miles northeast of, at summit of range, north of road, in telephone pole; spike, with aluminum tag stamped "1048"	1,050.86
King City, 8 miles northeast of, at angle in road, in fence post opposite gate leading to road in valley; spike, with aluminum tag stamped "928" (in Priest Valley quadrangle)	930.39
King City, 9.3 miles northeast of, at base of hill, 100 feet from San Lorenzo Creek, 200 feet east of dam, in fence post; spike, with aluminum tag stamped "697" (in Priest Valley quadrangle)	699.20
King City, 10.3 miles northeast of, west of San Lorenzo Creek, 5 feet from base of cottonwood tree, 20 feet from bank of creek; iron post, stamped "1908 Cal. 726 B" (recovered by L. F. Biggs in 1917 in Priest Valley quadrangle)	725.649

Primary leveling by L. F. Biggs in 1917

From south border of quadrangle near Jolon northwest along highways to west border of quadrangle (part of an unadjusted line closing +1.2 feet. See Lucia quadrangle)

Jolon, 2.7 miles north of, west edge of road, in root of white-oak tree scribed "U. S. 1077"; copper nail	1,077.47
Jolon, 3.6 miles north of, 100 feet north of T road east, west edge of road; iron post stamped "1105 1917 5"	1,105.266
Jolon, 5 miles north of, east edge of road, in root of 24-inch white-oak tree scribed "U. S. 1150"; copper nail	1,150.58
Jolon, 5.5 miles north of, 60 feet south of gate leading to Upper San Antonio, west edge of road, in base of 12-inch live-oak tree scribed "U. S. 1175"; copper nail	1,175.18
Jolon, 7 miles northwest of, 50 feet east of road, in base of 24-inch white-oak tree scribed "U. S. 1337"; copper nail	1,337.12
Jolon, 7.8 miles northwest of, in saddle, 20 feet south of road, in base of 8-inch white-oak tree scribed "U. S."; copper nail, aluminum tag stamped "1393"	1,393.69
Jolon, 8.6 miles northwest of, north bank of small creek, 40 feet south of road, 50 feet west of oak tree blazed; aluminum tablet in sandstone ledge stamped "1286 6 1917"	1,286.649
Jolon, 9.6 miles northwest of, at second-class Y road north, west edge of road, in root of 12-inch white-oak tree scribed "U. S. 1329"; copper nail	1,329.14
Jolon, 10.7 miles northwest of, 300 feet north of small bridge, 100 feet east of road, in root of white-oak tree scribed "U. S. 1278"; copper nail	1,278.10
Jolon, 11.2 miles northwest of, north edge of road, 60 feet east of gate leading to Milpitas School; iron post stamped "1374 7 1917"	1,373.974

LUCIA QUADRANGLE

[Latitude 36°–36° 15′; longitude 121° 30′–121° 45′]

MONTEREY COUNTY

Primary leveling by L. F. Biggs in 1917

From point 2.7 miles east of Marble Peak northwest along highways to posts

	Feet
Higgins cabin, 0.8 mile north of, 2.7 miles east of Marble Peak, at junction of Marble Peak and Tassajara Hot Springs trail with Lost Valley trail, south edge of trail; summit of boulder chiseled "U. S. 3428"	3,427.482
Marble Peak, 1.4 miles east of, in Indian Valley, north edge of trail, in root of 42-inch white-oak tree scribed "U. S. 2817"; copper nail	2,816.25
Marble Peak, at summit near cross trails, 20 feet south of trail, in root of 32-inch pine tree scribed "U. S. 3850"; copper nail	3,850.38
Marble Peak, 0.6 mile northwest of, 30 feet north of trail, in face of large boulder; aluminum tablet stamped "3949 16 1917"	3,948.719
Marble Peak, 2.5 miles northwest of, east edge of trail, in root of 36-inch pine tree scribed "U. S. 3827"; copper nail	3,826.20
Marble Peak, 3.7 miles northwest of, east edge of trail, in root of 36-inch oak tree scribed "U. S. 3702"; copper nail	3,702.05
Marble Peak, 4.3 miles northwest of, 30 feet south of gate, west side of trail, in root of large oak tree scribed "U. S. 3614"; copper nail	3,613.13
Marble Peak, 4.9 miles northwest of, 0.8 mile east of spring, 60 feet north of trail, on small spur, in top of large boulder; aluminum tablet stamped "3491 1917 17"	3,490.128
Marble Peak, 5.8 miles northwest of, south side of trail, 40 feet east of spring, in root of 30-inch oak tree scribed "U. S. 3280"; copper nail	3,279.96
Marble Peak, 6.8 miles northwest of, 3 miles southeast of Castro triangulation station, on top of ridge in small saddle, 40 feet west of trail, in top of marble boulder; tablet stamped "3350 18 1917"	3,348.755
Castro triangulation station, 1.3 miles southeast of, 100 feet north of trail, in root of 36-inch oak tree scribed "U. S. 3073"; copper nail	3,072.29
Posts, 3 miles southeast of, 500 feet north of Castro triangulation station, 300 feet west of trail, 30 feet west of north-and-south fence; aluminum tablet in boulder stamped "2769 12 1917"	2,766.162
Castro triangulation station, on small spur, the second well-defined ridge south of the point at which the "mountain trail" from Posts reaches the coast summit and turns south, and about 200 meters coastwise from the trail. There are two trails from Posts southward, one known as the "coast trail" and the other as the "mountain trail." Station is best reached by mountain trail. Station marked by stub with a tack in center about 2 feet in ground having its top level with surface, covered with pile of rocks, at base of signal on rock; chiseled point (Elev. by U. S. C. & G. S. Rept. 1904, p. 744=2818)	2,740.54
Posts, 2 miles southeast of, 800 feet south of barn, 125 feet east of trail, at summit, in root of large madrone tree scribed "U. S. 2696"; nail	2,692.85

	Feet
Posts, 0.8 mile southeast of, 150 feet east of green bush, 20 feet south of trail, on small bench, on summit of boulder; chiseled square marked "U. S."	1,617.88

From point 2.7 miles east of Marble Peak north along highways to north border of quadrangle

Marble Peak, 3 miles east of, 100 feet west of summit, north edge of trail; aluminum tablet set in foot of large rock, stamped "3538 1917 17"	3,537.038
Marble Peak, 3.8 miles east of, 20 feet north of Tanoak Creek, north edge of trail, on top of boulder chiseled "U. S. 2,869"; chiseled point	2,867.93
Marble Peak, 4.7 miles east of, north edge of trail, at east side of Strawberry Valley, in root of 12-inch white-oak tree; copper nail, aluminum tag stamped "2757"	2,756.06
Strawberry Valley, 1.4 miles northeast of, 0.5 mile east of Shovel-handle Creek, north edge of trail, in base of 8-inch live-oak tree; copper nail, aluminum tag stamped "2758"	2,757.03
Strawberry Valley, 2.1 miles northeast of, 1.1 miles west of Willow Spring, 400 feet north of saddle between Zigzag and Willow creeks, west edge of trail, in root of 8-inch madrone tree; copper nail, aluminum tag stamped "2739"	2,737.82
Willow Spring, 0.3 mile west of, 30 feet south of trail, east side of section corner, top of large rock; aluminum tablet stamped "2091 1917 20"	2,090.713
Willow Spring, 0.3 mile northeast of, trail fork to Tassajara Springs, north edge of Willow Creek; chiseled mark on summit of boulder, chiseled "U. S. 1781"	1,779.85
Willow Creek, 2 miles northeast of, 1.8 miles south of Tassajara Springs, 300 feet east of summit, north edge of trail; chiseled point on top of rock, chiseled "U. S. 2954"	2,953.04
Tassajara Springs, 1.1 miles southwest of, north edge of trail, in root of 18-inch live-oak tree, scribed "U. S. 2353"; copper nail	2,351.81
Tassajara Springs, 40 feet west of hotel, west edge of road at turn, in rock wall, 4 feet above ground; aluminum tablet, stamped "1539 1917 21"	1,538.078
Tassajara Springs, 1.3 miles north of, north edge of road, opposite horse-pasture trail to Arroyo Seco, summit of boulder; chiseled "U. S. 2272"	2,270.95

From east border of quadrangle northwest along highway to point 2.7 miles east of Marble Peak

NOTE.—This is part of an unadjusted line from Jolon and closes +1.200 feet upon the bench mark 2.7 miles east of Marble Peak.

Rancho Escondido, 1 mile northwest of, 100 feet west of Arroyo Seco crossing, north edge of trail; aluminum tablet in large boulder, stamped "1640 11 1917"	1,640.612
Rancho Escondido, 1.6 miles northwest of, east edge of trail, 60 feet south of small stream crossing, in root of 30-inch tan oak marked "U. S. 2065"; copper nail	2,065.51

Feet

Rancho Escondido, 3 miles northwest of, 3.4 miles southeast of Lost Valley, 700 feet east of saddle, south edge of trail; aluminum tablet on boulder, stamped "2851 12 1917"---------- 2,852.089

Lost Valley, 2.5 miles southeast of, west side of trail at old camp, summit of boulder; chiseled "U. S. B. M. 2454"---------- 2,454.68

Lost Valley, 1.4 miles southeast of, 1,500 feet east of summit, west edge of trail, in base of manzanita shrub, scribed "U. S. 2194"; copper nail---------- 2,194.78

Lost Valley, 0.8 mile southeast of, west edge of trail, at forks to ridge, in root of small manzanita shrub, marked on signboard "2274"; copper nail---------- 2,274.84

Lost Valley, west end of east meadow, 100 feet north of trail; aluminum tablet in large flat boulder, stamped "1787 1917 13"--- 1,787.433

Lost Valley, 1,000 feet west of camp, south edge of trail, summit of large boulder; chiseled "U. S. 1776"---------- 1,776.66

Lost Valley, 0.8 mile north of, north edge of trail, in saddle; top of small rock, painted "U. S. 2098"---------- 2,098.84

Lost Valley, 1.5 miles north of, 300 feet east of stream, in large opening on hillside, 100 feet east of trail, in large boulder; aluminum tablet stamped "1972 14 1917"---------- 1,972.480

Lost Valley, 2 miles north of, south edge of trail; top of large boulder, painted "U. S. B. M. 2301"---------- 2,302.11

Lost Valley, 3 miles north of, north edge of small meadow, in root of 24-inch oak tree scribed "U. S. 2884"; copper nail---------- 2,885.31

Lost Valley, 4 miles north of, 1 mile southeast of Higgins cabin, south side of trail, in sycamore tree marked "U. S. 2889"; copper nail---------- 2,889.71

Higgins cabin, 300 feet south of, east side of trail, in top of large boulder; aluminum tablet stamped "2801 15 1917"---------- 2,801.612

Higgins cabin, 0.8 mile north of, 2.7 miles east of Marble Peak, at junction of Marble Peak and Tassajara Hot Springs trail with Lost Valley trail, south edge of trail, opposite rock; summit of boulder, chiseled "U. S. 3428" (adjusted elevation 3427.482); elevation by this line---------- 3,428.682

METZ QUADRANGLE

[Latitude 36° 15′–36° 30′; longitude 121°–121° 15′]

MONTEREY AND SAN BENITO COUNTIES

Precise leveling by the U. S. Coast and Geodetic Survey in 1919

Southeast along Southern Pacific R. R.

Feet

Soledad, 4.6 miles southeast of, in horizontal surface of concrete over north side wall of culvert 148 A under tracks, 4 meters west of main-line track at Harlem siding; red metal disk (U. S. C. & G. S. b. m. J 22)---------- 205.124

	Feet
Metz, 1.7 miles north of, on east head wall of concrete culvert 150 B; iron bolt (U. S. G. S. description is Soledad, 7 miles southeast of, east of railroad, near point of curve, on cement culvert; chiseled square marked "218." Chiseled square was not located; an iron bolt cemented into culvert 150 B did, however, answer the rest of the above description, including the mark "218.") (U. S. C. & G. S. b. m. Q 22)	217.759
Metz, 1 mile north of, described as: Soledad, 7.7 miles southeast of, east of railroad, 20 feet south of culvert of highway under railroad, 300 feet east of white schoolhouse; U. S. G. S. iron post stamped "1908 Cal. 224 B" (U. S. C. & G. S. b. m. 127)	223.136
Metz, 0.3 mile south of, on south concrete abutment of plate-girder bridge 152 A over ravine south of Metz, 2 meters east of track and about 0.4 meter below it; red metal disk (U. S. C. & G. S. b. m. K 22)	243.877
Metz, 1.2 miles south of, on concrete foundation of mechanical freight loader, 10 meters south of south end of main tower, 12 meters west of track and level with it, about 0.1 meter above level of ground, at Espinosa siding; red metal disk (U. S. C. & G. S. b. m. L 22)	249.790
Metz, 2.2 miles south of, on north concrete abutment of deck culvert 154 B, 2 meters east of track and 1.3 meters below it; red metal disk (U. S. C. & G. S. b. m. M 22)	238.595
Metz, 3 miles south of, on west head wall of concrete culvert 155 B, 11 meters north of intermediate block signal 1554, 3 meters west of track and about 0.2 meter below it; red metal disk (U. S. C. & G. S. b. m. N 22)	242.178

Primary leveling by L. F. Biggs in 1917

Northwest along highway across northeast corner of quadrangle

Bitterwater pump station No. 5, opposite T road west, on south end of concrete water trough; chiseled square, painted "1490"	1,489.32
Bitterwater pump station, 3.4 miles north of, east side of road, in base of large oak tree scribed "U. S. 1778"; copper nail	1,777.87
Bitterwater pump station, 4.7 miles north of, east edge of road, in base of live-oak tree scribed "U. S. 1684"; copper nail	1,683.91
Bitterwater pump station, 5.7 miles north of, east edge of road, in base of small live-oak tree scribed "U. S. 1542"; copper nail	1,541.48
Bitterwater pump station, 6.7 miles north of, 5.3 miles south of San Benito, west edge of road, 80 feet south of bridge, 20 feet south of gate; iron post stamped "1386 1917 3"	1,385.689
San Benito, 3.8 miles south of, east edge of road, in base of large oak tree scribed "1560"; copper nail	1,559.48
San Benito, 2.7 miles south of, 800 feet north of Paicines ranch house, east edge of road, opposite windmill; iron post stamped "1529 4 1917"	1,529.078
San Benito, 1.5 miles south of, west edge of road, in base of large oak tree scribed "U. S. 1540"; copper nail	1,540.15

MONTEREY QUADRANGLE

[Latitude 36° 30′–36° 45′; longitude 121° 45′–122°]

MONTEREY COUNTY

Precise leveling by U. S. Coast and Geodetic Survey in 1919

Southwest along Southern Pacific R. R.

	Feet
Del Monte Junction, 3.1 miles west of, at mileage 113.5, in top face of east concrete abutment of large steel bridge over Salinas River, on north side of track; red metal disk (U. S. C. & G. S. b. m. W 20)	26.637
Marino, at mileage 117.3, about 10 meters northwest of open railway waiting shed on north side of track, in fence corner, in top of concrete post about 6 by 6 inches by 4 feet, set in ground with half a foot showing above surface; standard metal plate (U. S. C. & G. S. b. m. X 20)	44.961
Workfield, 0.1 mile west of signpost, in fence corner, southwest of road crossing, in top of concrete post about 6 by 6 inches by 4 feet, set in ground with half a foot showing above ground, 20 meters south of track; standard plate (U. S. C. & G. S. b. m. Y 20)	103.884
Seaside, 0.2 mile east of, at mileage 123.3, in top face of concrete culvert 123 A, 5 meters south of track; red metal disk (U. S. C. & G. S. b. m. A 21)	17.349
Monterey, in concrete base to railing at northwest corner of old custom house, about 1 meter from corner and about half a foot above ground; red metal disk (U. S. C. & G. S. b. m. B 21)	19.363
Monterey, in front face of First National Bank on Alvarado St., on north side of entrance, set vertically in wall about 5 feet above ground; red metal disk (U. S. C. & G. S. b. m. C 21)	26.975
Monterey, tidal bench mark, under Fish Commissioner's office, at head of old Pacific Coast Steamship Co.'s wharf, a shelf cut in granite bedrock with an "H" carved in rock immediately above and to the left of the mark (U. S. C. & G. S. b. m. D 21)	7.005
Monterey, 2 miles east of, a plate set in top of granite pillar at mileage 124.1, south of track 8 meters, post shows above ground about 2.5 feet (U. S. C. & G. S. b. m. E 21)	21.962

NOTE.—This post is an important corner post in the survey of lands of Monterey County. The description was obtained from the city engineer, Mr. Southworth, as the "Southwest corner of Noche Bueno Rancho and Monterey city land, Southern Pacific R. R. right of way post marked 'H. B. 2.'"

Leveling by Cornelius Schnurr in 1911

From point 9 miles east of Monterey west along highways to Monterey, thence south and east along highways to point 1 mile west of Rancho Del Monte, thence north along highways to starting point

Monterey, 9 miles east of, at T road south, from Monterey-Salinas road to Rancho Del Monte; iron post stamped "425"	424.802
Monterey, 8.8 miles east of, 0.2 mile west of T road to Rancho Del Monte, on north side of road, in telephone pole marked "401"; nail	400.69
Monterey, 8.2 miles east of, 0.8 mile west of T road to Rancho Del Monte, south side of road, in transmission line pole; nail, marked "388"	388.40

	Feet
Monterey, 7.5 miles east of, 75 feet west of windmill and tank on south side of road, in transmission line pole; nail	345.95
Monterey, 6.9 miles east of, 0.6 mile west of tank and windmill on south side of road, on north side of road; nail in post, marked "342"	342.24
Monterey, 6.1 miles east of, north side of road, in telephone pole 12–33; nail, marked "226"	226.44
Monterey, 5.5 miles east of, 3.5 miles west of T road south to Rancho Del Monte, south side of road; iron post stamped "169"	169.030
Monterey 4.7 miles east of, 0.3 mile east of Jacks's ranch house, south side of road, in transmission line pole; nail, marked "124"	124.04
Monterey, 4.1 miles east of, south side of road, in transmission line pole 5–5; nail, marked "162"	162.42
Monterey, 3.3 miles east of, south side of road, in telephone pole 15–34; nail, marked "195"	194.87
Monterey, 2 miles east of, on Monterey-Salinas road, 0.6 mile east of T road to Castroville, north side of road; iron post stamped "84"	84.080
Monterey, 1.6 miles east of, at junction of Salinas and Castroville roads, in east side of circular stone wall; nail, marked "25"	25.35
Monterey, 0.4 mile east of, 200 feet west of cemetery, on north end of concrete culvert; cross, marked "6"	6.55
Monterey, at junction of California and Emmet streets, in telephone pole; nail, marked "40"	39.93
Monterey, 1.2 miles south of, on Monterey-Carmel road, at its intersection with city-limit line; iron post stamped "293"	292.510
Monterey, 1.9 miles south of, in third post north from gate at entrance to 17-mile drive; nail, marked "567"	567.14
Monterey, 2.7 miles south of, on Monterey-Carmel road, at branch road to Carmel River valley; circle cut in end of concrete culvert, marked "562"	561.53
Monterey, 3.7 miles south of, 0.8 mile from junction of Carmel Valley and Coast roads, in telephone pole; nail, marked "299"	298.85
Monterey, 4.5 miles south of, at junction of Coast and Carmel Valley roads, 360 feet west of Hatton's dairy, in fence corner; iron post stamped "47"	47.405
Monterey, 6 miles southeast of, 1.3 miles east of Hatton's dairy, in telephone pole; nail, marked "87"	87.06
Monterey, 6.9 miles southeast of, 0.3 mile west of Hatton's upper dairy, in fence post at offset in fence; nail, marked "71"	70.85
Monterey, 7.6 miles south of, on Carmel Valley road, 0.5 mile east of Hatton's upper dairy, south side of road; iron post stamped "169"	168.987
Monterey, 8 miles southeast of, in front of Meadow's ranch house, in white post; nail, marked "110"	109.52
Monterey, 9 miles southeast of, in front of schoolhouse, in telephone pole; nail, marked "120"	120.29
Monterey, 10.6 miles southeast of, east of T Coast road, opposite Bralee's ranch house; iron post stamped "134"	134.191
Monterey, 11.5 miles southeast of, 0.5 mile from entrance to Sniveley's ranch, at top of grade, in telephone pole; nail, marked "304"	303.88
Monterey, 12.3 miles southeast of, 0.8 mile east of Nicholy's ranch house, in telephone pole; nail, marked "222"	221.60

	Feet
Tamasini's ranch house, 1,100 feet west of, in fence post; nail, marked "168"	168.38
Monterey, 14.4 miles southeast of, 400 feet west of branch road to pump station, south side of Carmel Valley road, in tree; nail, marked "212"	211.76
Monterey, 15.8 miles southeast of, 1 mile west of Rancho Del Monte, in fence post; nail, marked "244"	243.47
Monterey, 15.8 miles southeast of, 1 mile west of Rancho Del Monte, at junction of Carmel Valley and Laurelles Grade roads, in top of concrete post; tablet stamped "244"	244.364
Rancho Del Monte, 1.5 miles northwest of, on south side of Laurelles Grade road, in tree; nail, marked "403"	402.52
Monterey, 15 miles southeast of, 2.3 miles northwest of Rancho Del Monte, on Laurelles Grade road, in rock by water trough; tablet stamped "662"	661.922
Monterey, 13.7 miles southeast of, 3.6 miles north of Rancho Del Monte, on west side of road, in fence post; nail, marked "1112"	1,112.20
Monterey, 13.2 miles southeast of, at top of south side of Laurelles Grade, east side of road near gate, in fence post; nail, marked "1171"	1,170.64
Monterey, 12.6 miles southeast of, at top of north side of Laurelles Grade, in fence post; nail, marked "1167"	1,166.68
Monterey, 12 miles southeast of, on Laurelles Grade road, opposite J. Fraser's ranch house, in tree; nail, marked "1086"	1,085.57
Monterey, 10.9 miles southeast of, 1.9 miles south of junction of Laurelles Grade road and Monterey-Salinas road, on Laurelles Grade road at sharp bend, in fence post; nail, marked "907"	907.16
Junction of Corral De Tierra and Laurelles Grade roads, in Del Norte guide post; nail, marked "630"	630.25

From point 1.6 miles east of Monterey north along Southern Pacific R. R. to point 2.7 miles south of Castroville

Seaside, at west end of Casa Verde Way, in trolley-line pole; nail, marked "17"	17.47
Seaside station, 150 feet south of, in crossing post; nail, marked "22"	22.21
Seaside, 0.7 mile north of, in crossing post; nail, marked "39"	39.08
Monterey, 3.1 miles north of, at railroad crossing on Castroville road 2 feet inside of right-of-way fence; iron post stamped "90"	89.793
Gigling station, 1 mile south of, in third telephone pole north of milepost; nail, marked "98"	97.63
Gigling station, in gate post; nail, marked "145"	145.29
North Gigling milepost; nail, marked "71"	70.77
Gigling station, 1.9 miles northeast of, 700 feet north of "118" milepost, 2 feet inside of railroad fence, on right of way; iron post stamped "60"	60.400
Gigling station, 2.8 miles north of, 100 feet north of salt lagoon, in fence post; nail, marked "25"	24.81
Bardin station, 1,380 feet south of, in telephone pole; nail, marked "48"	47.73
Lapis station, in gate post; nail, marked "54"	53.59

From Carmel River along coast road to Yankee Point and return

	Feet
Carmel Mission, 1.1 miles south of, east side of road, in southwest corner of barn; nail, marked "20"	20.05
Carmel Mission, 2.1 miles south of, in north end of wagon bridge across San Jose Creek; nail, marked "15"	14.70
Carmel Mission, 2.8 miles south of, 1,100 feet south of T road to Point Carmel, in fence post; nail, marked "109"	108.92
Carmel Mission, 4 miles south of, 750 feet north of Ocean Home, in top of fence post; nail, marked "123"	122.87
Carmel Mission, 4.5 miles south of, 0.4 mile south of Ocean Home, on west side of road, in top of fence post; nail, marked "164"	163.62
Carmel Mission, 4.6 miles south of, at Yankee Point, east side of Coast road, in rock; tablet stamped "232"	231.802

Leveling by Cornelius Schnurr in 1911

Near southeast corner of quadrangle (taken from 1911 list)

Monterey, 15.8 miles southeast of, 1 mile northwest of Rancho Del Monte, at junction of Carmel and Laurelles Grade roads, top of concrete post; tablet stamped "244"	244.364

JUNIPERO SERRA, KING CITY, METZ, AND SOLEDAD QUADRANGLES

[Latitude 36°–36° 30′; longitude 121°–121° 30′]

MONTEREY AND SAN BENITO COUNTIES

Primary leveling by W. H. Monahan in 1908 and by L. F. Biggs in 1909

From Gonzales southeast along railroad to point 2.6 miles southeast of San Lucas

	Feet
Gonzales, 1 mile southeast of, east of road, 50 feet east of railroad, in telephone pole; spike with aluminum tag stamped "139"	138.97
Gonzales, 2.1 miles southeast of, east of road, 50 feet southeast of railroad, in telephone pole; spike with aluminum tag stamped "150"	149.40
Gonzales, 2.98 miles southeast of, west of road at railroad crossing, in corner of fence, 20 feet from railroad; iron post stamped "1908 Cal 158 B"	157.946
Gonzales, 4 miles southeast of, west of road, 50 feet west of railroad, in telephone pole; spike with aluminum tag stamped "170"	169.900
Gonzales, 5 miles southeast of, on west side of road, 50 feet from railroad, in telephone pole; spike with aluminum tag stamped "169"	168.60
Camphora, 75 feet northeast of gray house, in corner of fence at angle in road; iron post stamped "1908 Cal 173 B"	172.746
Camphora, 1.5 miles southeast of, east of road, 50 feet east of railroad, in telephone pole; spike with aluminum tag stamped "170"	169.50
Camphora, 2.5 miles southeast of, east of road, 50 feet from railroad, in telephone pole; spike with aluminum tag stamped "180"	179.80
Soledad, north edge of town, in corner of fence between road and railroad; iron post stamped "1908 185 B"	184.100
Soledad, south edge of town, at fence corner, 30 feet east of railroad track; iron post stamped "1908 Cal 189 B"	188.669

	Feet
Soledad, 0.3 mile southeast of, at road crossing; top of rail, marked "192"	191.80
Soledad, 1.1 miles southeast of, 25 feet east of railroad, in telephone pole; spike with aluminum tag stamped "196"	195.00
Soledad, 3 miles southeast of, west of railroad, in telephone pole; spike with aluminum tag stamped "223"	222.10
Soledad, 3.6 miles southeast of, east of railroad, 300 feet north of milepost 147; iron post stamped "1908 Cal 204 B"	203.542
Soledad, 5 miles southeast of, 5 feet west of track, in switch post; spike with aluminum tag stamped "207"	206.50
Soledad, 6 miles southeast of, east of track, 200 feet north of road crossing, in telegraph pole; spike with aluminum tag stamped "211"	210.00
Soledad, 7 miles southeast of, east of railroad, near point of curve, on cement culvert; iron bolt marked "218"	217.76
Soledad, 7.7 miles southeast of, east of railroad, 20 feet south of culvert of highway under railroad, 300 feet east of white schoolhouse; iron post stamped "1908 Cal 224 B"	223.136
Metz, in front of station; top of rail, marked "239"	238.62
Metz, 1.1 miles southeast of, west of railroad, in telegraph pole; spike with aluminum tag stamped "248"	246.97
Metz, 1.7 miles southeast of, west of railroad; iron post stamped "1908 Cal 244 B"	242.941
Metz, 3 miles southeast of, west of railroad, near curve and switch, in telegraph post; spike with aluminum tag stamped "244"	243.30
Metz, 5.3 miles southeast of, east of railroad, 1,000 feet north of milepost 158; iron post stamped "1908 260 B"	259.330
Metz, 6.2 miles southeast of, east of railroad, 1,000 feet north of milepost 159, in telegraph pole; spike with aluminum tag stamped "263"	262.68
Metz, 7.1 miles southeast of, east of railroad, 1,000 feet north of milepost 160, in telegraph pole; spike with aluminum tag stamped "271"	270.40
Metz, 8.2 miles southeast of, east of railroad at edge of fence, 1,000 feet north of milepost 161; iron post stamped "Cal 1908 281 B"	280.150
Metz, 9.1 miles southeast of, east of railroad, 1,000 feet north of milepost 162, in telegraph pole; spike with aluminum tag stamped "297"	296.46
Metz, 10.4 miles southeast of, east of railroad, in milepost 163; spike with aluminum tag stamped "325"	324.18
King City, in front of station; top of rail, marked "337"	336.2
King City, corner of Broadway and First St., in cement walk of El Camino Real hotel; aluminum tablet stamped "335 B" (C. & G. S. R 22)	334.661
King City, south edge of town, in corner of line fence west side of railroad, 200 feet south of railroad water tank; iron post stamped "1908 Cal 338 B" (U. S. C. & G. S., 1920)	337.818
King City, 1.1 miles southeast of, east of railroad, 1,000 feet south of milepost 165, in telegraph pole; spike with aluminum tag stamped "316"	315.67
King City, 2 miles southeast of, east of railroad, 1,000 feet south of milepost 166, in telegraph pole; spike with aluminum tag stamped "315"	314.56

	Feet
King City, 3 miles southeast of, east of railroad and switch, 1,000 feet south of milepost 167; iron post stamped "1908 Cal. 321 B" (C. & G. S. b. m. V 22)	320.662
King City, 3.9 miles southeast of, west of railroad, 1,000 feet south of milepost 168, in telegraph pole; spike with aluminum tag stamped "336"	335.40
King City, 5 miles southeast of, west of railroad, 1,000 feet south of milepost 169, in telegraph pole; spike with aluminum tag stamped "371"	370.40
King City, 6 miles southeast of, east of railroad, 1,000 feet south of milepost 170, in telegraph pole; spike with aluminum tag stamped "383"	382.50
King City, 6.9 miles southeast of, 5 feet west of railroad, at edge of concrete culvert; iron post stamped "1908 Cal. 394 B" (C. & G. S. b. m. X 22)	393.497
King City, 7.8 miles southeast of, east of railroad, in milepost 172; spike with aluminum tag stamped "393"	392.85
San Lucas, north edge of town, in fence corner, 40 feet from center of railroad, 200 feet north of road crossing; iron post stamped "1908 Cal. 394 B" (U. S. C. & G. S. b. m. Z 22)	393.917
San Lucas, in front of station; top of rail	403.80
San Lucas, south edge of town, in corner of fence, with red house, 10 feet from center of railroad; iron post stamped "1908 Cal. 408 B"	407.552
San Lucas, 1.6 miles southeast of, west of railroad, 100 feet south of road crossing, in telegraph pole; spike with aluminum tag stamped "407"	407.300
San Lucas, 2.6 miles southeast of, west of railroad, 100 feet north of block signal, in telegraph pole; spike with aluminum tag stamped "410"	410.03
From San Lucas southwest along highway to point 5 miles north of Jolon	
San Lucas, 2.2 miles southwest of, east of road, north of white barn, in telephone pole; spike with aluminum tag stamped "375"	374.59
San Lucas, 2.9 miles southwest of, 175 feet west of point where road turns due west for Jolon, in fence post; spike with aluminum tag stamped "452"	451.73
San Lucas, 4 miles southwest of, south of road, in telephone pole; spike with aluminum tag stamped "535"	534.66
San Lucas, 5.3 miles southwest of, in fence corner, 700 feet west of yellow house on right of road; iron post stamped "1908 Cal. 652 B"	652.236
San Lucas, 6.2 miles southwest of, north of road, in base of white oak tree; spike with aluminum tag stamped "689"	688.74
San Lucas, 7 miles southwest of, 150 feet south of mud-brick house on bank, in telephone pole; spike with aluminum tag stamped "785"	784.74
San Lucas, 8.1 miles southwest of, north of road, in telephone pole; spike with aluminum tag stamped "956"	956.04
San Lucas, 9.3 miles southwest of, at angle in road, west of road, in telephone pole; spike with aluminum tag stamped "1247"	1,246.61
San Lucas, 10.1 miles southwest of, west of road, 35 feet south of telephone pole; iron post stamped "1908 Cal. 1434 B"	1,433.743

	Feet
San Lucas, 10.9 miles southwest of, west of road at forks of road, 100 feet south of summit, in telephone pole; spike with aluminum tag stamped "1673"	1,673.61
From King City northeast along highway 10 miles toward Lonoak	
King City, 1 mile northeast of, north of road, in telephone pole; spike with aluminum tag stamped "396"	395.63
King City, 2.1 miles northeast of, north of road, in telephone pole; spike with aluminum tag stamped "465"	464.51
King City, 2.98 miles northeast of, north of road, at clump of trees on north, in telephone pole; spike with aluminum tag stamped "483"	482.72
King City, 4 miles northeast of, south of road, 1,000 feet east of old barn at curve in road, in telephone pole; spike with aluminum tag stamped "563"	562.52
King City, 5 miles northeast of, east of road, 1,000 feet east of white wire gate leading to ranch house in valley; iron post stamped "1908 Cal. 667 B"	666.099
King City, 7.1 miles northeast of, west of summit of range, on south side of road, in fence post; spike with aluminum tag stamped "959"	961.78
King City, 7.4 miles northeast of, north of road, at summit of range, in telephone pole; spike with aluminum tag stamped "1048"	1,050.86
King City, 8 miles northeast of, opposite gate leading to road in valley at angle in road, in fence post; spike with aluminum tag stamped "928"	930.39
King City, 9.3 miles northeast of, at base of hill, 100 feet from San Lorenzo Creek, 200 feet east of dam. in fence post; spike with aluminum tag stamped "697"	699.20
King City, 10.3 miles northeast of, west of San Lorenzo Creek, 5 feet from base of cottonwood tree, 20 feet from bank of creek; iron post stamped "1908 Cal. 726 B"	725.649
From point 0.6 mile southeast of Somavia School southeast along county road to point 4 miles southwest of Soledad	
Somavia School, 0.6 mile southeast of, west side of road, in base of 40-inch live-oak tree; copper nail with aluminum tag stamped "143 B. M. 14")	143.28
Somavia School, 1.6 miles southeast of, 500 feet south of large barn, in base of 30-inch live-oak tree; copper nail scribed and painted "135 B. M. 15"	135.11
Gonzales, 2.9 miles west of, 50 feet west of bridge over Salinas River, northwest corner of intersection of roads; iron post stamped "110 B 1909 B 1"	110.081
Gonzales, 2.9 miles west of, 0.8 mile southeast of, at intersection of road to west, in base of fence post; scribed and painted "165 B. M. 3;" spike	164.61
Gonzales, 2.9 miles west by 2.1 miles south of, west side of road, at bend on summit of small ridge, in base of 36-inch live-oak tree scribed and painted "208 B. M. 4;" spike	206.67
Gonzales, 2.9 miles west by 3.3 miles south of, west edge of road, at section line, in base of fence post scribed and painted "209 B. M. 5"; spike	208.82

	Feet
Gonzales, 2.9 miles west by 4.9 miles south of, east edge of road, at section line, southeast corner of field, in base of 30-inch oak tree scribed and painted "322 B. M. 6;" copper nail (local error)	322.57
Gonzales, 2.9 miles west by 5.9 miles south of, west edge of road, 0.4 mile north of junction of road to Camphora, in base of fence post scribed and painted "289 B. M. 7;" spike	286.39
Subranis School, in southeast corner of school yard, at junction of road to Camphora; iron post stamped "211 1909 B 2"	211.536
Subranis School, 1.1 miles southeast of, south side of road, in base of 40-inch oak tree scribed and painted "159 B. M. 8"; copper nail	156.30
Subranis School, 1.9 miles southeast of, east edge of road, north end of gate to second-class road through Spreckles Sugar Co.'s ranch, in base of gatepost scribed and painted "218 B. M. 9"; spike	214.88
Subranis School, 2.8 miles southeast of, at J. Whisman's ranch, 5 feet east of mail box, in base of fence post; spike with aluminum tag stamped "194 B. M. 23"	191.48
Mission schoolhouse, 0.3 mile northwest of, southwest corner of field, at intersection of road to east; iron post stamped "238 B 1909 B 7"	234.641
Mission schoolhouse, 1.3 miles southeast of, east edge of road, at lane to east, in base of gatepost; spike with aluminum tag stamped "210 B. M. 24"	206.72

From Soledad south up Arroyo Seco to point 4 miles southwest of Greenfield, thence northeast via Greenfield to Metz

Soledad, 1 mile south of, 50 feet north of bridge over Salinas River, in base of telegraph pole 3086; spike with aluminum tag stamped "196 B. M. 35"	195.05
Soledad, 1.7 miles south of, at intersection of King City and Paraiso Hot Spring roads, in base of telegraph pole; spike with aluminum tag stamped "196 B. M. 36"	194.85
Soledad, 2.9 miles south of, 0.5 mile south of bridge over Arroyo Seco, at intersection of roads; iron post stamped "185 B 1909 B 12"	184.294
Soledad, 4.8 miles south of, northwest corner of bridge over canal, in floor; copper nail with aluminum tag stamped "203 B. M. 37"	202.85
Soledad, 6.2 miles south of, west edge of road, 250 feet north of grove of trees, at cross fence, in base of fence post; spike with aluminum tag stamped "315 B. M. 38"	314.86
Soledad, 6.8 miles south of, 25 feet east of intersection of road to west, 0.3 mile south of white barn; iron post stamped "375 B 1909 B 13"	374.678
Soledad, 7.7 miles south of, east edge of road, at second-class road, in base of gatepost; spike with aluminum tag stamped "396 B. M. 39"	395.35
Soledad, 8.8 miles south of, 0.2 mile north of point where road bends southwest, in base of telephone pole; spike with aluminum tag stamped "378 B. M. 40"	377.48
Greenfield, 4.3 miles west of, on section line, 1 mile north of Arroyo Seco; iron post stamped "376 B 1909 B 14"	375.710
Greenfield, 2.3 miles southwest of, southeast corner of field, 15 feet south of irrigation canal; iron post stamped "329 B 1909 B 15"	329.062

	Feet
Greenfield, 1.7 miles southwest of, southeast corner of field, 300 feet south of house, 700 feet south of crossroad, in base of fence post; spike with aluminum tag stamped "313 B. M. 42"	311.79
Greenfield, 0.6 mile northwest of, at intersection of road, in base of telephone pole 3322; spike with aluminum tag stamped "277 B. M. 43"	275.57

From King City southwest to bridge, thence northwest to Greenfield

King City, 0.9 mile southwest of, in floor of bridge over irrigation ditch; spike with aluminum tag stamped "313 B. M."	312.49
King City, 1.9 miles southwest of, 200 feet south of bridge over Salinas River, at intersection of road; iron post stamped "330 B 1909 B 8"	329.412
King City bridge, 1 mile northwest of, west side of road, in base of telephone pole 3736; spike with aluminum tag stamped "321 B. M. 26"	320.87
King City bridge, 2.1 miles northwest of, west edge of road, in base of telephone pole 3693; spike with aluminum tag stamped "348 B. M. 27"	347.20
King City bridge, 3 miles northwest of, west edge of road, where road turns around steep bluff, 5 feet north of telephone pole 3656; iron post stamped "338 B 1909 B 9"	337.929
King City bridge, 4.2 miles northwest of, west edge of road, in base of telephone pole 3609; spike with aluminum tag stamped "282 B. M. 28"	281.66
Greenfield School, at large gate to school yard; iron post stamped "286 B 1909 B 16"	285.365
Greenfield, southeast end of town, at crossroad, south end of concrete culvert over irrigation ditch; aluminum tablet stamped "287 B 1909 B 11" (moved, 1917)	286.304
Greenfield, 0.9 mile northeast of, east side of road, opposite windmill, in base of fence post; spike with aluminum tag stamped "244 B. M. 33"	243.24
Greenfield, 2 miles northeast of, north edge of road, at second-class road to ranch, in base of fence post; spike with aluminum tag stamped "246 B. M. 34"	246.13
King City bridge, 5.3 miles northwest of, west side of road, in base of telephone pole 3565; spike with aluminum tag stamped "308 B. M. 29"	307.68
King City bridge, 6.4 miles northwest of, 3.2 miles southeast of Greenfield, 5 feet north of telephone pole 3520, on line between barn and windmill; iron post stamped "317 B 1909 B 10"	316.545
Greenfield, 1 mile southeast of, in base of telephone pole 3398; spike with aluminum tag stamped "267 B. M. 32"	266.17

From point 1.2 miles southeast of Gonzales northeast to Gloria School, thence southeast and southwest to Camphora

Gonzales, 1.6 miles southeast of, at intersection of road to east, in base of telephone pole; spike with aluminum tag stamped "143 B. M. 15"	143.20
Gonzales, 4.7 miles east by road, west bank of old creek bed, 0.5 mile south of Gloria School; iron post stamped "515 B 1909 B 5"	514.636

	Feet
Gloria School, 1.9 miles south of, where road jogs east, opposite house in small grove of trees, in base of 24-inch pine tree; spike scribed and painted "396 B. M. 19"	395.60
Gloria School, 3 miles southeast of, northeast corner of field, 500 feet east of barn where road turns to south; iron post stamped "338 B 1909 B–6"	338.158

From Camphora southwest to Subranis School

Camphora, 1.6 miles southwest of, east edge of road, north bank of river, in base of fence post; spike with aluminum tag stamped "147 B. M. 45"	146.30
Camphora, 2.7 miles southwest of, 100 feet north of bend of road, opposite small house, in base of cottonwood tree; spike with aluminum tag stamped "141 B. M. 46"	140.58

From Gonzales southwest to Gonzales bridge

Gonzales, 2.1 miles west of, opposite road to south, in base of fence post scribed and painted "124 B. M. 2"; spike	124.06

POINT SUR QUADRANGLE

[Latitude 36° 15′–36° 30′; longitude 121° 45′–122°]

MONTEREY COUNTY

Primary leveling by L. F. Biggs in 1909

From Chualar southwest and southeast to point 4 miles southwest of Soledad (portion of line)

	Feet
Chualar bridge, 2.4 miles southeast of, 800 feet south of road to west, on east side of road, in base of forked oak tree; copper nail scribed and painted "147 B. M. 13"	147.24
Chualar bridge, 3.5 miles southeast of, west side of road, opposite Wooster house, 0.5 mile north of Somavia School; iron post stamped "132 B 1909 B. 4"	132.016

Leveling by L. F. Biggs in 1916

From Yankee Point south and southeast along Coast Road to Posts and to Pfeiffer Point and Castro triangulation stations

Carmel Mission, 4.5 miles south of, 0.4 mile south of Ocean House, on west side of road, in top of fence post; nail, marked "164"	163.62
Carmel Mission, 4.6 miles south of, on Coast road at Yankee Point, east side of road, near gate; bronze tablet, stamped "232" (set by C. Schnurr in 1911)	231.802
Carmel Mission, 5.4 miles south of, southeast concrete abutment of high bridge over creek; chiseled square, marked "U. S. 88"	88.22
Carmel Mission, 6.8 miles south of, south corner of Mr. Daud's field, in fence post, painted "U. S. 132 B. M."; nail	131.44
Carmel Mission, 7.6 miles south of, 4.8 miles north of Notleys landing, south bank of Roberanes Creek, 100 feet north of barn, 100 feet west of road, in rock cliff; bronze tablet, stamped "123 1 1917"	122.724
Notleys Landing, 3.8 miles north of, 100 feet east of road, in north end of cultivated field, summit of large boulder; chiseled square, marked "U. S. 94"	94.30

	Feet
Notleys Landing, 2.6 miles north of, west edge of road at rocky point, summit of large boulder; chiseled square, marked "U. S. 189"	189.33
Notleys Landing, 1.7 miles north of, 80 feet south of steel bridge, 20 feet west of road, in flat boulder; bronze tablet, stamped "49 2 1917"	48.729
Notleys Landing, 1.4 miles north of, west edge of road in saddle, in top of fence post, painted "U. S. 131"	130.80
Notleys Landing, 60 feet south of gate leading to old mill, west edge of road, in top of large rock; bronze tablet, stamped "161 3 1917"	161.610
Notleys Landing, 0.7 mile south of, in front of Smith ranch house, in root of cypress tree scribed "U. S. 229"; nail	229.07
Notleys Landing, 1.5 miles south of, in floor of Rocky Creek bridge, painted "U. S. 215 B. M."; copper nail	214.71
Notleys Landing, 2.1 miles south of, summit between Rocky and Mill creeks, in fence post, painted "U. S. 409 B. M."; nail	409.62
Hoges ranch house, 20 feet west of Mill Creek bridge, in root of 72-inch redwood tree scribed "U. S. 90"; nail	90.26
Hoges, 0.5 mile south of, west edge of road, in rock cliff; bronze tablet, stamped "324 4 1917"	324.313
Hoges, 1.3 miles south of, east edge of road, in root of 72-inch redwood tree scribed "U. S. 552" (erroneously); nail	562.36
Sierra summit, 600 feet north of, east edge of road, in base of rock cliff; bronze tablet stamped "1100 5 1917"	1,100.754
Sierra summit, east side of road, at base of large gate post; copper nail, painted "U. S. 1164"	1,164.01
Little Sur River, 0.5 mile north of, north edge of road, in top of water trough; nail, painted "U. S. 351 B. M."	348.13
Little Sur bridge, 400 feet north of, north edge of road, in face of rock cliff; bronze tablet stamped "124 6 1917"	121.028
Little Sur River, 1 mile south of, 0.2 mile north of Cooper ranch house, in root of live-oak tree scribed "U. S. 401"; nail	398.31
Sur summit, 0.6 mile north of, 150 feet west of schoolhouse, 10 feet east of Sur Lighthouse mail box, at forks of road to Point Sur, in top of fence post; nail, painted "U. S. 720"	717.86
Sur Summit, 100 feet southwest of signboard at summit, on rock; bronze tablet stamped "945 7 1917"	942.245
Sur Summit, 1.2 miles south of, 50 feet east of road, in root of large live-oak tree scribed "U. S. 706"; nail	702.54
A. J. Molera ranch house, 0.4 mile north of, east edge of road, in rock cliff; bronze tablet stamped "135 8 1917"	131.347
A. J. Molera ranch house, 50 feet east of road, in base of cottonwood tree scribed "U. S. 43"; nail	38.89
A. J. Molera ranch house, 1 mile south of, west edge of road, near bridge, in root of sycamore tree scribed "U. S. 106"; nail	102.50
Big Sur post office, 2.2 miles northwest of, north edge of road, near gate leading to north, in large boulder; tablet stamped "U. S. 159 9 1917"	155.36
Big Sur post office, 1.5 miles northwest of, 20 feet north of Juan Hiquera Creek, in root of 18-inch sycamore tree scribed "U. S. 157"; nail	153.40
Big Sur post office, 0.5 mile northwest of, north edge of road, opposite field, in root of 24-inch live-oak tree scribed "U. S. 192"; nail	188.29

	Feet
Big Sur post office, 10 feet west of, in summit of boulder; bronze tablet stamped "232 10 1917"	228.378

Leveling by L. F. Biggs in 1916

At and near Pfeiffer Point triangulation station (single spur line)

Big Sur post office, 1.7 miles south of, 100 feet west of Pfeiffer barn, in root of 48-inch fir tree scribed "U. S. 215"; nail	210.88
Pfeiffer Point triangulation station, upon land of Michael Pfeiffer, about 0.5 mile southwest of his house, on prominent headland or knoll. The ocean face of the knoll has been made precipitous by wave erosion. Station marked by a hole 0.5-inch in diameter and 1 inch deep, drilled in the rock 1 foot below the surface. The hole was filled with lead with cross lines drawn to mark the center, 4 feet west by 0.5 foot north of; bronze tablet stamped "393"	388.989

From Big Sur southeast across northeast corner of quadrangle

Big Sur post office, 0.8 mile south of, at road forks to Pfeiffer Point, in root of buckeye tree scribed "U. S."; nail	471.88
Posts, 100 feet south of schoolhouse, in large boulder; bronze tablet stamped "11 1917 1005"	1,001.153
Posts, 0.8 mile southeast of, 150 feet east of green bush, 20 feet south of trail, on small bench, on top of boulder; chiseled square marked "U. S."	1,617.88

QUIEN SABE QUADRANGLE

[Latitude 36° 45′–37°; longitude 121°–121° 15′]

MERCED AND SAN BENITO COUNTIES

Primary leveling by L. F. Biggs in 1917 with yard rod

From south border of quadrangle along highways north and west to point near northwest corner of quadrangle

	Feet
Buena Vista ranch, 1 mile south of, 200 feet north of summit, east edge of road, in base of large oak tree scribed "U. S. 1830"; nail	1,830.14
Buena Vista ranch, 0.5 mile southeast of, west edge of road, at second-class road south, in gate post painted "U. S. B. M. 1648"; spike	1,648.26
Buena Vista ranch house, south edge of road opposite barn; iron post stamped "1654 1917 22"	1,654.000
Buena Vista ranch, 0.9 mile northwest of, 40 feet east of road, in base of large oak tree scribed "U. S. 1562"; nail	1,562.46
Buena Vista ranch, 2.4 miles northwest of, 30 feet west of road, in base of large oak tree scribed "U. S. 1589"; nail	1,589.21
Buena Vista ranch, 4.1 miles northwest of, west edge of road, in front of Quien Sabe School; iron post stamped "1608 1917 23"	1,608.106
Quien Sabe School, 1.4 miles northwest of, 200 feet west of road, in base of large oak tree scribed "U. S. 1601"; nail	1,600.76
Quien Sabe School, 3 miles north of, 300 feet south of ranch house, in base of large oak tree scribed "U. S. 1631"; nail	1,631.40
Quien Sabe School, 4.4 miles north of, 1.5 miles south of head of Quien Sabe Valley, 40 feet west of road, on east edge of valley, in root of oak tree scribed "U. S. 1645"; nail	1,644.96

	Feet
Quien Sabe Valley, 300 feet northeast of canal at north end of valley, in top of boulder at foot of hill; aluminum tablet stamped "24 1917 1719"	1,719.062
Quien Sabe Valley, 0.8 mile north of, 300 feet north of water trough, 40 feet west of trail, in base of large live-oak tree scribed "U. S. 2187"; nail	2,187.43
Quien Sabe Valley, 2 miles north of, 1 mile south of Stayton mine, east edge of trail, in base of oak tree scribed "U. S. 2603"; nail	2,603.30
Stayton mine, 0.6 mile east of, 50 feet west of trail on top of ridge, in base of oak tree scribed "U. S. 2893"; copper nail	2,893.39
Stayton mine, 800 feet west of building, 60 feet south of road, in saddle, in top of flat boulder; bronze tablet stamped "3036 25 1917"	3,036.538
Stayton mine, 1.4 miles west of, north edge of road, in base of large oak tree scribed "U. S. 2570"; nail	2,570.44

Primary leveling by L. F. Biggs in 1919

Along highways near east border of quadrangle, connected with levels on Carrisalito Springs quadrangle

Carrisalito Springs, 1.3 miles north of, 100 feet south of creek, 300 feet northeast of gate, on side of hill, on top of boulder; tablet stamped "113 704 1919 B B"	702.915
Carrisalito Springs, 1.3 miles north of, 10 feet east of gate, in fence post painted "U. S. 687"; spike	686.58
Carrisalito Springs, 1.6 miles north of, 20 feet east of road, at summit, top of rock flush with ground; chiseled circle, painted "U. S. 750" on 1 by 6 inch board	749.42
Los Banos Creek, 1.3 miles south of, 10 feet east of road, at summit of grade, on top of rock; chiseled circle, chiseled "U. S. 650"	649.53
Los Banos Creek, 0.7 mile south of, 100 feet west of road, at point of ridge, on top of boulder; bronze tablet stamped "114 1919 B B 540"	538.944
Los Banos Creek, 500 feet south of, east bank of small creek, 20 feet south of road fork, on summit of rock; chiseled "457"	457.51
Gaston Bide ranch house, 2 miles northwest of, 0.5 mile west of Los Banos Canyon, on east-west fence line, in base of cottonwood tree; spike, scribed "U. S. 415"	414.60
Gaston Bide ranch house, 1.4 miles northwest of, in fence post painted "U. S. 490"; spike	489.50

SALINAS QUADRANGLE

[Latitude 36° 30′–36° 45′; longitude 121° 30′–121° 45′]

MONTEREY COUNTY

Precise leveling by the U. S. Coast and Geodetic Survey in 1919

Southeast along Southern Pacific R. R.

	Feet
Del Monte Junction, 0.7 mile south of, described as "Castroville, 0.6 mile south of," 400 feet south of milepost 111, east edge of right of way, opposite south end of Y; iron post stamped "S. F. 20 1908 40" (U. S. C. & G. S. b. m. H 21)	19.534

	Feet
Del Monte Junction, 1.6 miles south of, on concrete highway bridge at railroad mile 112, opposite Southern Pacific R. R. culvert 111 P, in horizontal surface of curbing wall over central pier of bridge, on east side of highway; red metal disk (U. S. C. & G. S. b. m. I 21)	16.529
Del Monte Junction, 2.3 miles south of, on one of the several wooden posts supporting cattle guard 112 B, 2 meters west of track and level with it, at north side of road; top of bolt in top of post (U. S. C. & G. S. b. m. 100)	23.156
Del Monte Junction, 3.1 miles south of, on west head wall of concrete culvert 113 B, 3 meters west of track and about 1 meter below it; red metal disk (U. S. C. & G. S. b. m. J 21)	22.205
Salinas, 4.2 miles north of, described as "Salinas, 5.2 miles northwest of," 20 feet north of milepost 114, east of railroad; G. S. iron post stamped "S. F. 28 1908 41" (the distance northwest of Salinas is 4.2 miles) (U. S. C. & G. S. b. m. K 21)	28.146
Salinas, 1.5 miles north of, 250 meters north of road crossing at Calvary Cemetery, 2 meters inside right of way fence, 13 meters west of track and about 1 meter below it; hole cut in stone or concrete post (U. S. C. & G. S. b. m. L 21)	42.159
Salinas, 200 feet south of station, at north end of Southern Pacific R. R. park; iron post stamped "S. F. 48 1908 44" (U. S. C. & G. S. b. m. M 21)	49.272
Salinas, on grounds of City Hall, about 12 meters east of main east entrance to building, 1.5 meters north of sidewalk; bottom of hole cut in cement or stone post (U. S. C. & G. S. b. m. N 21)	50.472
Salinas, at south entrance to Monterey County jail, at west end of steps, in stone baluster; G. S. aluminum tablet stamped "S. F. 53 1908 43" (U. S. C. & G. S. b. m. O 21)	53.350
Salinas, 0.9 mile south of, 200 meters south of road crossing at Union Oil Co.'s tanks, 1 meter north of second telegraph pole south of milepost 119, 10 meters east of track and about 0.5 meter below it; bottom of hole cut in cement or stone post (U. S. C. & G. S. b. m. P 21)	49.498
Salinas, 2.6 miles south of, at road crossing south of Spreckles Junction Y, 1 meter north of post at intersection of road and right of way fence, on south side of road, 12 meters west of track and about 0.8 meter below it; bottom of hole in stone or cement post (U. S. C. & G. S. b. m. Q 21)	60.134
Salinas, 4.2 miles south of, at southeast corner of concrete highway culvert, at railroad mileage 122.4, opposite railroad culvert 122 B, 18 meters west of track and about 1.5 meters below it; red metal disk (U. S. C. & G. S. b. m. R 21)	61.043
Salinas, 4.8 miles south of, described as "Salinas, 4.6 miles southeast of," 100 feet west of milepost 123, on line between right of way and county road; U. S. G. S. iron post stamped "S. F. 68 1908 54" (U. S. C. & G. S. b. m. S 21)	68.071
Spence, 0.5 mile north of, on east head wall of concrete culvert 124 D, at railroad mileage 124.8, 3 meters east of track and about 1 meter below it; red metal disk (U. S. C. & G. S. b. m. T 21)	80.190

	Feet
Spence, 1.5 miles south of, on right of way of Southern Pacific R. R., 1 meter from fence post, at northeast corner of intersection of right of way with road crossing, 15 meters east of track and level with it; bottom of hole in stone or cement post (U. S. C. & G. S. b. m. U 21)	97.116
Spence, 2.4 miles south of, on west head wall of concrete culvert 127 B, 1 meter west of track, about 0.1 meter below it; red metal disk (U. S. C. & G. S. b. m. V 21)	105.079
Chualar, 0.2 mile north of station, 20 feet south of road crossing, at north edge of town, on line between right of way and county road; U. S. G. S. iron post stamped "S. F. 109 1908 52." (The bench mark is 20 feet north of present road crossing.) (U. S. C. & G. S. b. m. W 21)	108.379

Leveling by Cornelius Schnurr in 1911

From point 5.4 miles southwest of Spreckles west along highway to point 9.4 miles east of Monterey

Monterey, 10.1 miles east of, 1.1 miles east of T road to Rancho Del Monte, on north side of road, in fence post; nail, marked "421"	421.25
Monterey, 9.4 miles east of, 0.4 mile east of T road to Rancho Del Monte, on south side of road, in telephone pole; nail, marked "487"	487.01

Primary leveling by B. A. Jenkins in 1908 and T. H. Moncure in 1908

From point near Castroville southeast along Southern Pacific R. R. to point 2 miles southeast of Chualar

Salinas, 5.2 miles northwest of, 20 feet north of milepost 114, east of railroad; iron post stamped "S. F. 28 1908 41" (U. S. C. & G. S. b. m. K 21)	28.146
Graves, in front of signboard; top of rail	36.6
Salinas, at east entrance to Salinas High School, at south end of steps, in cement baluster; aluminum tablet stamped "S. F. 53 1908 42"	52.900
Salinas, at south entrance to Monterey County jail, at west end of steps, in stone baluster; aluminum tablet stamped "S. F. 53 1908 43" (U. S. C. & G. S. b. m. O 21)	53.350
Salinas, in front of station; top of rail	48.8
Salinas, 200 feet south of station, at north end of Southern Pacific R. R. park; iron post stamped "S. F. 49 1908 44" (U. S. C. & G. S. b. m. M 21)	49.272
Salinas, 4.6 miles southeast of, 100 feet west of milepost 123, on line between right of way and county road; iron post stamped "S. F. 68 1908 54" (U. S. C. & G. S. b. m. S 21)	68.071
Spence, in front of station; top of rail	84.3
Spence, 0.6 mile southeast of, 10 feet north of milepost 126; iron post stamped "S. F. 91 1908 53"	90.230

	Feet
Chualar, 0.2 mile north of station, 20 feet south of road crossing, at north edge of town, on line between right of way and county road; iron post stamped "S. F. 109 1908 52" (U. S. C. & G. S. b. m. W 21)	108.379
Chualar, in front of station; top of rail	102.2

From Salinas north and northwest to Castroville

Santa Rita, 0.5 mile north of, at road junction; iron post stamped "S. F. 115 1908 45"	115.401
Castroville, 0.7 mile south by 1.7 miles east of, 7.1 miles northwest of Salinas, at north edge of road; iron post stamped "S. F. 61 1908 46"	61.074
Castroville, 0.6 mile south of, 400 feet south of milepost 111, east edge of right of way, opposite south end of Y; iron post stamped "S. F. 20 1908 40"	19.34

From point 3.8 miles north of Salinas east to Natividad, thence south to Spence

Natividad, 100 feet south of saloon, at fence corner; iron post stamped "S. F. 161 1908 57"	160.909
Natividad, 3.7 miles southeast of, 0.5 mile south of limestone quarry, at angle in road, at east edge of road; iron post stamped "S. F. 185 1908 56"	184.852
Spence, 2 miles northeast by 1 mile north of, at east edge of road; iron post stamped "S. F. 133 1908 55"	133.150

From point 2 miles southeast of Salinas southwest to Spreckles, thence southeast and northeast to Chualar

Spreckles, 2 miles northeast of, 50 feet south of road junction, north of road, opposite Harkin's ranch house; iron post stamped "S. F. 65 1908 47"	65.312
Spreckles, office of Spreckles Sugar Co., at south end of steps at main entrance, in cement baluster; aluminum tablet stamped "S. F. 62 1908 48"	61.890
Alfred Hansen's ranch house, 3.2 miles northwest of, 100 feet west of forks of road, in fence corner; iron post stamped "S. F. 81 1908 49"	80.820
Chualar, 2.3 miles southwest by 3.1 miles northwest of, opposite Alfred Hansen's ranch house, at west edge of road; iron post stamped "S. F. 96 1908 50"	95.183
Chualar, 2.3 miles southwest of, northwest angle of fork road, at west corner of new steel bridge over Salinas River, in cement pier; aluminum tablet stamped "S. F. 90 1908 51"	89.320

From point near Spreckles southwest and south to Washington School, thence east to Lincoln School, thence northeast to point 2 miles northwest of Hansen ranch house.

Spreckles, 2.25 miles west by 1 mile south of, north of road, opposite second-class road from southeast; iron post stamped "138 104"	138.224
Spreckles, 3 miles west by 2 miles south of, in center of road, in south side of blazed sycamore tree painted; nail and aluminum tag marked "165 105"	165.25

	Feet
Toro Creek, near Spreckles; surface of water September 8, 1908	215.2
Spreckles, 4.5 miles west by 3 miles south of, in southwest forks of junction of Monterey and Salinas and Corral De Tierra roads; iron post stamped "291 107"	291.322
Washington School, at southeast corner of schoolhouse; iron post stamped "506 110"	505.69
Lincoln School, at northeast corner of schoolhouse; iron post stamped "951 113"	951.418
Divide between Corral De Tierra (valley) and Pine Canyon, in northwest corner of road forks; iron post stamped "1988 116"	1,988.568
Pine Canyon, mouth of, 500 feet west of W. V. Brady's ranch house, sharp turn of road around point, on lower side of road; iron post stamped "652 119"	652.103

From Chualar southwest to point 1.3 miles southeast of Chualar bridge

Chualar, 2.6 miles west of, 75 feet west of bridge over Salinas River, at intersection of north-south road, at fence line; iron post stamped "100 B 1909 B 3"	99.881
Chualar, 1.2 miles southeast of, west of road, 50 feet from railroad, in telephone pole; spike with aluminum tag stamped "108"	107.70

SAN BENITO QUADRANGLE

[Latitude 36° 30′–36° 45′; longitude 121°–121° 15′]

SAN BENITO COUNTY

Primary leveling by L. F. Biggs in 1917 with yard rod

From south border of quadrangle northwest along highway to point near Paicines

	Feet
San Benito, 0.5 mile southwest of, on west end of concrete bridge at T road to San Benito; chiseled point marked "U. S. B. M. 1400"	1,400.19
San Benito, 1 mile northwest of, south edge of road at summit; iron post stamped "1594 1917 5"	1,593.526
San Benito, 1.8 miles northwest of, east side of road, 100 feet southeast of house, in base of large live-oak tree in farm yard; copper nail scribed "U. S. 1283"	1,283.00
San Benito, 3.0 miles northwest of, 200 feet east of Y road to The Pinnacles, north edge of road, in base of large oak tree scribed "U. S. 1188"; copper nail	1,187.83
San Benito, 4.2 miles northwest of, 600 feet south of Cook post office, west edge of road opposite house; iron post stamped "1269 1917 6"	1,269.375
Cook post office, 1 mile northwest of, west edge of road, in root of white-oak tree scribed "U. S. 1345"; copper nail	1,344.50
Cook post office, 2.2 miles northwest of, 40 feet east of road, in base of large oak tree scribed "U. S. 1371"; copper nail	1,371.23
Cook post office, 3.4 miles northwest of, east edge of road, in base of oak tree scribed "U. S. 1459"; copper nail	1,458.76
Cook post office, 3.9 miles northwest of, 500 feet south of house, west edge of road at summit, under tree; iron post stamped "1917 1479 7"	1,478.863

	Feet
Cook post office, 4.9 miles northwest of, east edge of road, in base of live-oak tree scribed "1277"; spike	1,276.70
Cook post office, 6.2 miles northwest of, 200 feet south of Willow Creek bridge, south side of triangle at Y road, near north corner of school yard; iron post stamped "1007 S 1917"	1,007.405
Willow Creek, 1 mile northwest of, west edge of road, in base of white-oak tree scribed "U. S. 978"; copper nail	977.97
Willow Creek, 2 miles northwest of, on west end of north concrete abutment of San Benito River highway bridge; chiseled square, marked "U. S."	935.71
San Benito River bridge, 0.8 mile northwest of, at stock corral, top of concrete water trough; painted "U. S. B. M. 953"	952.92
San Benito River bridge, 1.9 miles northwest of, 13.6 miles southeast of Tres Pinos, 100 feet north of small bridge, 600 feet south of silo, west edge of road; iron post stamped "855 9 1917"	854.812
Tres Pinos, 13 miles south of, opposite Mulberry post office, west edge of road, in base of oak tree scribed "U. S."; spike, aluminum tag stamped "843"	842.95
Tres Pinos, 12 miles south of, at T road west with signboard "Mulberry P. O. 1 mile," in corner fence post; spike painted "U. S. B. M. 778"	778.21
From point near Paicines east in northwest part of quadrangle	
Paicines, 2.9 miles southeast of, east edge of road at gate leading to Browns Valley; iron post stamped "20 1917 777"	776.954
Paicines, 3.6 miles southeast of, 50 feet north of Browns Valley road, near small cabin, in base of large eucalyptus tree scribed "U. S. 804"; copper nail	804.54
Paicines, 5 miles east of, 1.6 miles easterly from Tres Pinos Creek on Browns Valley road, in base of gate post painted "U. S. B. M. 1365"; spike	1,364.67
Browns Valley, 6.3 miles east of Paicines, 250 feet west of road, on land owned by Mrs. Henshaw, in top of guy post of windmill painted "U. S. B. M. 1636"; spike	1,636.53
Browns Valley, 2.2 miles south of Buena Vista ranch, west edge of road on first summit toward Buena Vista ranch; iron post stamped "1857 21 1917"	1,857.052

SAN JUAN BAUTISTA QUADRANGLE

[Latitude 36° 45′–37°; longitude 121° 30′–121° 45′]

MONTEREY, SAN BENITO, SANTA CLARA, AND SANTA CRUZ COUNTIES

Precise leveling by U. S. Coast and Geodetic Survey

From Gilroy to Castroville along Southern Pacific R. R.

	Feet
Gilroy, Gilroy Free Library Building, in Fifth St. face, west of main steps, 4 feet above ground; red metal disk set vertically (U. S. C. & G. S. b. m. Z 19)	206.525
Gilroy, southwest corner of city hall, east of steps, immediately above corner stone, about 4 feet above sidewalk; red metal disk (U. S. C. & G. S. b. m. Y 19)	201.302

Feet

Gilroy, in Southern Pacific R. R. grass plot west of track, 100 feet south of station. Bench mark removed and now situated immediately southwest of two small oil tanks, about 200 feet south of station, 5 meters east of track; U. S. G. S. bronze tablet on iron post stamped (?) (U. S. C. & G. S. b. m. J 19)---------- 196.640

Gilroy, 0.8 mile south of, at mileage 81.4, on west side of track, in top face of center of concrete pier of railroad deck trestle 81 B; red metal disk (U. S. C. & G. S. b. m. A 20)---------- 191.912

Gilroy, 2.9 miles south of, at mileage 83.5, on top face of south concrete abutment of trestle 83 G, on west side of track; red metal disk (U. S. C. & G. S. b. m. B 20)---------- 177.880

Gilroy, 3.2 miles south of, 80 feet south of milepost 84, south (east) of track near fence; G. S. iron post stamped "S. F. 167 1908 13" (U. S. C. & G. S. b. m. I 20)---------- 166.968

Gilroy, 6.4 miles south of, 0.2 mile east of Sargent, west (north) of track, 30 feet south (west) of milepost 87; G. S. iron post stamped "S. F. 138 1908 14"---------- 138.225

Sargent, 2.6 miles south of, at mileage 89.1, 6 meters east of track, in top face of railroad culvert 89 E; red metal disk (U. S. C. & G. S. b. m. D 20)---------- 141.056

Chittenden, about 40 meters north of open station shed, 10 meters west of track, in top of concrete railroad culvert 91 E; red metal disk (U. S. C. & G. S. b. m. E 20)---------- 124.741

Aromas, 0.8 mile north of, at mileage 53.8, 15 meters east of track and about 2 meters below level of same, in concrete railroad culvert 93 G; red metal disk (U. S. C. & G. S. b. m. F 20)---------- 103.081

Chittenden, 4.8 miles south of, east of track, 50 feet south of milepost 96, at fence line; G. S. iron post stamped "S. F. 66 1908 17" (U. S. C. & G. S. b. m. G 20)---------- 66.525

Watsonville Junction, 2.0 miles north of, at mileage 98.4, west of track, in concrete base of block signal stand 984; red metal disk (U. S. C. & G. S. b. m. K 20)---------- 49.380

Watsonville Junction, 1.4 miles north of, 20 feet south of milepost 99; G. S. iron post, described as Pajaro (old name for Watsonville Junction), 1.1 miles east of, 20 feet south of milepost 99; iron post stamped "S. F. 36 1908 18" (U. S. C. & G. S. b. m. L 20)---- 36.535

Watsonville Junction, mileage 100.4, 200 meters east of station, north of branch Y leading to north past roundhouse, in most southwesterly of four central concrete posts supporting large steel oil tank, west of track; red metal disk (U. S. C. & G. S. b. m. M 20)-- 28.360

Watsonville Junction, 100 meters west of roundhouse, 75 meters north of track leading to Watsonville, in southeast one of four central pillars supporting large water tank, tank is west of two tanks standing close together; red metal disk (U. S. C. & G. S. b. m. N 20)---------- 25.358

Watsonville Junction, 1.6 miles south of, at mileage 102, 8 meters west of track, 50 feet south of milepost 102; G. S. iron post stamped "S. F. 19 1908 37" (U. S. C. & G. S. b. m. P 20)-------- 18.953

Watsonville Junction, 3.1 miles south of, at mileage 103.5, on west side of track, center of "9" in 1912 on railroad culvert 103 B; red metal disk (U. S. C. & G. S. b. m. Q 20)---------- 9.278

	Feet
Watsonville Junction, 4.6 miles south of, 100 feet north of milepost 105, at east edge of track; G. S. iron post. Described as "Pajaro, 4.8 miles south of, 100 feet north of 105 milepost, stamped 'S. F. 3 1908 38'" (U. S. C. & G. S. b. m. R 20)	3.520
Elkhorn, 0.1 mile south of, opposite milepost 106, in north abutment of railroad culvert 105 C, on west side of main track; red metal disk (U. S. C. & G. S. b. m. S 20)	6.509
Elkhorn, 0.6 mile south of, at mileage 106.7, center of first "9" in 1909, on west side of track, on railway culvert 106 A; red metal disk (U. S. C. & G. S. b. m. T 20)	5.026
Del Monte Junction, 2.7 miles north of, at mileage 107.7, in center of top face of culvert 107 C, on west side of track; red metal disk (U. S. C. & G. S. b. m. U 20)	25.695
Del Monte Junction, a Geological Survey iron post described as "Pajaro, 8.1 miles south of, 2.4 miles north of Castroville, 800 feet south of milepost 108, east of track; iron post stamped 'S. F. 21 1908 39'" (U. S. C. & G. S. b. m. V 20)	21.112
H–21 (this is described on list of subparty by Lowell J. Chawner and is junction point with work of that section of the party)	19.534

Primary leveling by B. A. Jenkins in 1908

From Gilroy south and west along Southern Pacific R. R. to Watsonville

Carnadero, in front of station; top of rail	171.8
Gilroy, 3.2 miles south of, 80 feet south of milepost 84, south of track; iron post stamped "S. F. 167 1908 13" (U. S. C. & G. S. b. m. I 20)	166.968
Miller, in front of station; top of rail	156.8
Gilroy, 6.4 miles south of, 0.2 mile east of Sargent, south of track, 30 feet west of milepost 87; iron post stamped "S. F. 138 1908 14" (U. S. C. & G. S. b. m. C 20)	138.225
Sargents, in front of station; top of rail	139.5
Sargents, 2.8 miles west of, north of track, 170 feet east of milepost 90; iron post stamped "S. F. 144 1908 15"	144.400
Chittenden, in front of station; top of rail	128.9
Chittenden, 1.7 miles west of, 650 feet west of milepost 93, 900 feet east of rock crusher, south of track; iron post stamped "S. F. 124 1908 16"	123.948
Logan, in front of station; top of rail	117.5
Aromas, in front of station; top of rail	98.5
Chittenden, 4.8 miles west of, south of track, 50 feet south of milepost 96; iron post stamped "S. F. 66 1908 17" (U. S. C. & G. S. b. m. G 20)	66.525
Vega, in front of station; top of rail	62.9
Pajaro, 1.1 miles east of, 20 feet west of milepost 99; iron post stamped "S. F. 36 1908 18" (U. S. C. & G. S. b. m. L 20)	36.535
Pajaro, in front of station; top of rail	26.9
Watsonville, 0.5 mile south of, at northeast corner of Pajaro bridge, in top of pier; aluminum tablet stamped "S. F. 30 1908 19"	29.767
Watsonville, in front of station; top of rail	27.1

From Pajaro south to point 0.6 mile south of Castroville and return

	Feet
Pajaro, 1.8 miles south of, 50 feet west of milepost 102, on line between right of way and county road; iron post stamped "S. F. 19 1908 37" (U. S. C. & G. S. b. m. P 20)	18.953
Pajaro, 4.8 miles south of, 100 feet north of milepost 105, at east edge of track; iron post stamped "S. F. 3 1908 38" (U. S. C. & G. S. b. m. R 20)	3.520
Elkhorn, in front of station; top of rail	8.3
Pajaro, 8.1 miles south of, 2.4 miles north of Castroville, 800 feet south of milepost 108, east of track; iron post stamped "S. F. 21 1908 39" (U. S. C. & G. S. b. m. V 20)	21.112
Castroville, in front of station; top of rail	22.5
Castroville, 0.6 mile south of, 400 feet south of milepost 111, east of track, opposite south end of Y; iron post stamped "S. F. 20 1908 40" (U. S. C. & G. S. b. m. H 21)	19.534

SOLEDAD QUADRANGLE

[Latitude 36° 15′–36° 30′; longitude 121° 15′–121° 30′

MONTEREY COUNTY

Precise leveling by U. S. Coast and Geodetic Survey in 1919

Southeast along Southern Pacific R. R.

	Feet
Gonzales, 1.5 miles south of, at road crossing, on railroad right of way, 3 meters north of fence, on north side of road crossing tracks, 8 meters east of track and 1 meter below it; bottom of hole cut in stone or cement post (U. S. C. & G. S. b. m. B 22)	145.065
Gonzales, 2.2 miles south of, at road crossing, on west head wall of concrete culvert 137 B, 8 meters west of track and about 1.3 meters below it; red metal disk (U. S. C. & G. S. b. m. C 22)	148.064
Gonzales, 2.98 miles southeast of, west of road at railroad crossing, in corner of fence, 20 feet from railroad; G. S. iron post stamped "1908 Cal. 158 B." (The distance southeast of Gonzales as referred to the present Southern Pacific R. R. mileage is 2.8 miles.) (U. S. C. & G. S. b. m. D 22)	157.946
Soledad, 2.6 miles north of, 1 meter south of first telegraph pole south of milepost 141, at second road crossing south of Camphora warehouse, 8 meters west of track and 0.5 meter below it; bottom of hole on stone or cement post (U. S. C. & G. S. b. m. E 22)	168.376
Soledad, 1.8 miles north of, on west head wall of concrete culvert 141 E, 2 meters west of track and 0.5 meter below it; red metal disk (U. S. C. & G. S. b. m. F 22)	170.046
Soledad, on most northwesterly one of several concrete piers supporting Southern Pacific R. R. water tank, about 75 meters west of tracks; red metal disk (U. S. C. & G. S. b. m. G 22)	187.106
Soledad, 1.9 miles southeast of, in cut at south end of deep fill, 3 meters west of track and 0.1 meter below, about 0.2 mile north of road crossing, on concrete base of intermediate block signal 1456; red metal disk (U. S. C. & G. S. b. m. H 22)	223.795
Soledad, 3.0 miles southeast of, on concrete side wall of flood-water weir box and culvert 146 D, 2.5 meters east of track and about 0.3 meter below it; red metal disk (U. S. C. & G. S. b. m. I 22)	211.020

DEGREE QUADRANGLE 37°–38°, 117°–118°

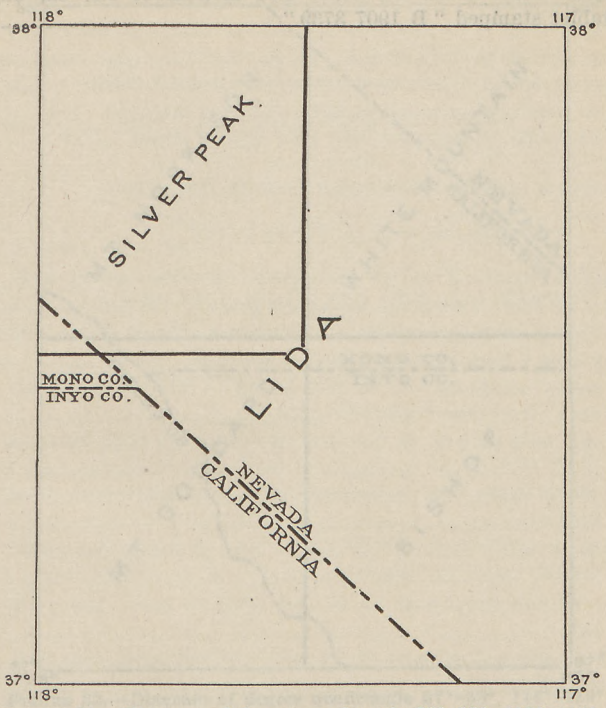


FIGURE 31.—Diagram of degree quadrangle 37°–38°, 117°–118°

LIDA QUADRANGLE

[Latitude 37°–38°; longitude 117°–118°]

INYO AND MONO COUNTIES

Precise leveling by R. A. Farmer in 1905

From Piper ranch northeast to Oasis

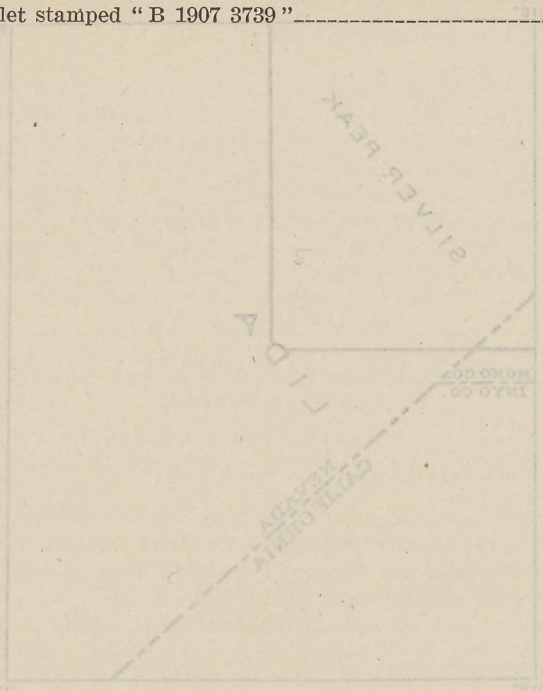
	Feet
Piper ranch, first summit west of; iron post stamped "6371"	6,368.395
Oasis, 2.5 miles southwest of, at road forks; iron post stamped "5300"	5,297.092
Oasis, northeast corner of post-office wall; bronze tablet stamped "5106 C. C." (old value, 5,106.101. Appendix to 19th Ann. Rept.)	5,025.226
Oasis, 3 miles southeast of, 30 feet north of road, 0.25 mile east of forks of road; iron post stamped "5081"	5,074.887

Primary leveling by L. F. Biggs in 1907

From Mesquite Springs north to State line monument No. 82. (Assumed 1 yard error placed at State line)

Mesquite Springs, 4.8 miles north of, opposite Grapevine Springs, 20 feet west of road, large boulder; tablet stamped "B 1907 2078"	2,076.062

	Feet
Sand Spring, 50 feet southwest of, boulder flush with ground; tablet stamped "B 1907 3127"	3,125.201
Sand Spring, 4 miles north of, 200 feet east of road; California-Nevada State line monument No. 82, top of painted post	3,736.135
Sand Spring, 4 miles north of, State line monument No. 82, on boulder; tablet stamped "B 1907 3739"	3,734.287



DEGREE QUADRANGLE 37°–38°, 118°–119°

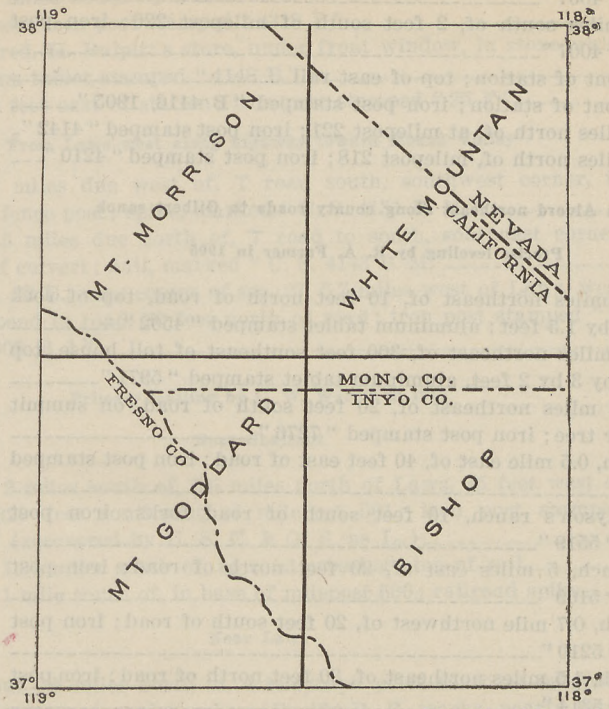


FIGURE 32.—Diagram of degree quadrangle 37°–38°, 118°–119°

BISHOP QUADRANGLE

[Latitude 37°–37° 30′; longitude 118°–118° 30′]

FRESNO, INYO, AND MONO COUNTIES

Precise leveling by R. A. Farmer in 1905

North along Southern Pacific R. R. to Laws

	Feet
Aberdeen, 1 mile north of, at milepost 252; iron post stamped "3850"	3,848.038
Aberdeen, 4 miles north of, 60 feet south of milepost 249; iron post stamped "3850"	3,857.116
Alvord, 6.5 miles south of, at milepost 246; iron post stamped "3881"	3,879.081
Alvord, 3.5 miles south of, at milepost 243; iron post stamped "3897"	3,894.891
Alvord, in front of station; iron post stamped "3930"	3,927.847
Alvord, in front of station; top of rail	3,927.3
Alvord, 2.5 miles north of, 120 feet south of milepost 237, west of track; iron post stamped "3952"	3,949.816
Alvord, 5.5 miles north of, 100 feet north of milepost 234; iron post stamped "3981"	3,978.675

	Feet
Alvord, 8.5 miles north of, at milepost 231; iron post stamped "4007"	4,005.074
Alvord, 10.5 miles north of, 150 feet south of milepost 229; iron post stamped "4007"	4,032.645
Laws, 2.5 miles south of, 2 feet south of milepost 226; iron post stamped "4007"	4,062.390
Laws, in front of station; top of east rail	4,110.1
Laws, in front of station; iron post stamped "B 4116, 1905"	4,111.478
Laws, 2.5 miles north of, at milepost 221; iron post stamped "4142"	4,139.395
Laws, 5.5 miles north of, milepost 218; iron post stamped "4210"	4,207.606

From Alvord northeast along county roads to Gilbert ranch

Precise leveling by R. A. Farmer in 1905

Alvord, 2.9 miles northeast of, 10 feet north of road, top of rock 2.5 by 2.5 by 1.5 feet; aluminum tablet stamped "4502"	4,500.066
Alvord, 6.4 miles northeast of, 300 feet southeast of toll house, top of rock 3 by 3 by 2 feet, aluminum tablet stamped "5971"	5,968.980
Alvord, 10.7 miles northeast of, 20 feet south of road, on summit near cedar tree; iron post stamped "7276"	7,273.796
Payson cabin, 0.5 mile east of, 40 feet east of road; iron post stamped "6557"	6,554.343
Road to Payson's ranch, 10 feet south of road forks; iron post stamped "5519"	5,516.533
Payson's ranch, 5 miles east of, 20 feet north of road; iron post stamped "5109"	5,106.322
Gilbert ranch, 0.7 mile northwest of, 20 feet south of road; iron post stamped "5210"	5,207.065
Gilbert ranch, 1.5 miles northeast of, 30 feet north of road; iron post stamped "5314"	5,311.688

Primary leveling by L. F. Biggs in 1905

From point near Aberdeen north along road to Big Pine, thence east to Alvord

Big Pine, 12.3 miles south of, 1 mile north of Bower's house, 20 feet west of road, volcanic rock; aluminum tablet stamped "3870 B"	3,866.493
Big Pine, 7.8 miles south of, under window in front of Fish Spring schoolhouse; iron post stamped "3936 B"	3,932.497
Big Pine, 6.3 miles south of, 100 feet west of south end of pond, volcanic rock; aluminum tablet stamped "3888 B"	3,884.490
Big Pine, 3.3 miles south of, 500 feet northwest of Rheinackle's house, 150 feet west of road, volcanic rock; bronze tablet stamped "3934 B"	3,930.588
Big Pine, 4 feet north of schoolhouse; iron post stamped "4003 B"	3,999.908
Alvord, in front of station; iron post stamped "F 19"	3,927.847

From Big Pine north along road to Bishop, thence east to Laws

Big Pine, 2 miles north by 2 miles west of, west side of road at cliff of rocks, boulder; aluminum tablet stamped "3982 B"	3,978.436
Big Pine, 6.5 miles northwest of, near quarter corner east side of sec. 36, T. 8 S., R. 33 E., 60 feet west of road, in boulder; aluminum tablet stamped "4037 B"	4,033.667

Feet

Valley School, 3.5 miles north of, common corner of secs. 32 and 33, T. 7 S., and secs. 4 and 5, T. 8 S., R. 34 E., 0.25 mile south of Butler School, 600 feet west of road; iron post stamped "4046"--- 4,042.794

Bishop, 2 miles south by 1 mile west of, 300 feet west of canal, at stone post; iron post stamped "4319 B"---------- 4,316.299

Bishop, Fred. H. Bulpitt's store, under front window, in stone wall; aluminum tablet stamped "4148 B"---------- 4,144.789

Laws, 100 feet east of station; iron post stamped "25 F"---------- 4,111.478

From Laws west along highway toward Round Valley

Laws, 1.7 miles due west of, T road south, southwest corner, in base of fence post; spike, marked "U. S. 4131 B. M."---------- 4,127.80

Bishop, 2.5 miles due north of, T road to south, southeast corner, in top of culvert; nail, marked "U. S. 4143 B. M."---------- 4,140.34

T. 6 S., R. 32 E., near center of sec. 27, 5.7 miles west of Laws, west end of bend in road, 20 feet north of road; iron post stamped "B 4356, 1905 B 1"---------- 4,352.832

Primary leveling by C. W. Wardle in 1912

Near Chalfant

Chalfant, 2 miles south of, 5.5 miles north of Laws, 35 feet west of track, 320 feet southwest of milepost 501; iron post stamped "4210" (recovered by U. S. C. & G. S. as L_{111})---------- 4,207.606

Chalfant, 1.34 miles south of, at road crossing; top of rail---------- 4,210.2

Chalfant, 1 mile south of, in base of milepost 500; railroad spike----- 4,214.93

Near Laws

Laws, about 2.5 miles north of, 4 telegraph poles south of milepole 504, 10 meters west of Southern Pacific R. R. tracks, nearly level with top of rail; iron post marked "U. S. G. S." (U. S. C. & G. S. b. m. M_{111})---------- 4,139.395

MOUNT GODDARD QUADRANGLE

[Latitude 37°–37° 30′; longitude 118° 30′–119°]

FRESNO, INYO, AND MONO COUNTIES

Primary leveling by L. F. Biggs in 1905

West and northwest of Laws

Feet

Laws, 10.7 miles west of, 1,000 feet west of Fred Meger's house, west side of road, granite boulder; aluminum tablet stamped "B 4422 1905 B 2"---------- 4,417.563

Laws, 14 miles northwest of, 2 miles south of Will Robert's ranch, 60 feet west of road, volcanic rock; aluminum tablet stamped "B 1905 B 3 4513"---------- 4,507.796

Laws, 17 miles northwest of, 1 mile north of Will Robert's house, near Mono-Inyo county line, east side of road, volcanic rock; aluminum tablet stamped "B 1905 14 4698 B"---------- 4,693.013

MOUNT MORRISON QUADRANGLE

[Latitude 37° 30′–38°; longitude 118° 30′–119°]

FRESNO AND MONO COUNTIES

Primary leveling by L. F. Biggs in 1905

From point 21 miles northwest of Laws northwest to Deadman Hill

	Feet
Laws, 21 miles northwest of, summit of Sherwin Hill, 60 feet west of road, volcanic boulder; aluminum tablet stamped "B 1905 B 6432"	6,426.111
Laws, 24.7 miles northwest of, south end of meadow, 15 feet east of road, 30 feet west of Rock Creek, granite boulder; aluminum tablet stamped "B 1905 6815 B 16"	6,809.585
Laws, 28.5 miles northwest of, 100 feet north of Crookes Creek, north side of road, 200 feet northeast of forks of road, in volcanic rock; aluminum tablet stamped "B 1905 B 7 6765"	6,780.785
Laws, 30 miles northwest of, 200 feet east of proposed dam site, north side of river, 20 feet from water, large boulder; aluminum tablet stamped "B 1905 B 8 6668"	6,664.173
Laws, 34 miles northwest of, 1 mile north of Eaton's house, north side of road, in boulder; aluminum tablet stamped "B 1905 9 6834"	6,828.971
Laws, 37.5 miles northwest of, sec. 13, T. 4 S., R. 24 E., 300 feet north of Summer's gate, 200 feet north of road, large boulder; aluminum tablet stamped "B 1905 10 7066"	7,060.138
Laws, 41.5 miles northwest of, 1 mile north of Summer's house, 300 feet south of Hot Creek, 100 feet south of road, at point of volcanic boulders; aluminum tablet stamped "B 1905 B 11 7196"	7,190.726
Laws, 45 miles northwest of, 2 miles northwest of Casa Diablo, 60 feet west of road, boulder; aluminum tablet stamped "B 1905 12 7581"	7,575.282
Laws, 48.5 miles northwest of, 5.5 miles northwest of Casa Diablo, summit between Hot and Deadman creeks, 200 feet north of road, volcanic rock; aluminum tablet stamped "B 1905 13 7657"	7,650.716
Laws, 52 miles northwest of, 0.75 mile north of Deadman Creek, west side of road about halfway up Deadman Hill, large boulder; aluminum tablet stamped "B 1905 B 14 7723"	7,727.462

Primary leveling by C. R. Smith in 1898

From Rush Creek (Mono Lake) southeast to Mono Mills, thence southwest to Crater Ridge

Mono Mills road, about 3 miles southeast of where road leaves lake shore, 15 feet to right of road and about 200 feet east of foot of spur of Crater Ridge; iron post stamped "6899 O"	6,903.077
Mono Mills, in northwest corner post of sawmill; aluminum tablet stamped "7335 O"	7,339.409
Bodie–Benton wagon road, on summit between Mono Lake and Owens River drainage, 20 feet east of road; iron post stamped "7987 O"	7,991.309

WHITE MOUNTAIN QUADRANGLE

[Latitude 37° 30′–38°; longitude 118°–118° 30′]

MONO COUNTY

Precise leveling by the U. S. Coast and Geodetic Survey in 1915

From California-Nevada State line south along the Southern Pacific R. R. to Laws

	Feet
Queen, about 6.2 miles southwest of, 240 feet south of road crossing, 35 feet east of track, 9 feet east of milepole 473; iron post stamped "U. S. G. S. 5,556" (C. & G. S. b. m. Z_{10})	5,548.893
Benton station, 50 feet east of track, southeast corner of station foreman's yard; iron post stamped "U. S. G. S. 5405" (C. & G. S. b. m. A_{11})	5,393.244
Benton station, about 3 miles south of, 30 feet east of track, 5 feet east of milepole 479; iron post stamped "U. S. G. S. 5277" (C. & G. S. b. m. B_{11})	5,264.835
Benton station, about 6 miles south of, 55 feet east of track, in low spot behind first pole south of milepole 482; iron post stamped "U. S. G. S. 4996" (C. & G. S. b. m. C_{11})	4,984.012
Benton station, about 7 miles south of, near milepole 483, 10 feet east of track, opposite culvert sign 482 E, on granite rock; painted circle marked "4904" (U. S. G. S.) (C. & G. S. b. m. D_{11})	4,893.258
Benton station, about 8 miles south of, 20 feet west of track, 100 feet west of milepole 484, halfway between culvert signs 483 C and 484 A; chiseled granite rock, marked "4804" (C. & G. S. b. m. E_{11})	4,791.605
Benton station, about 9 miles south of, 40 feet east of the track, 6 feet from first pole north of milepost 485; iron post marked "4712" (U. S. G. S.) (C. & G. S. b. m. F_{11})	4,699.692
Hammil, 30 feet west of track, near southeast corner of section foreman's yard outside enclosure; iron post stamped "4598" (U. S. G. S.) (C. & G. S. b. m. G_{11})	4,586.297
Dehy, about one-third of a mile north of, 5 meters north of milepole 489, 10 meters east of Southern Pacific R. R. tracks, 20 meters northwest of corner of Jim Dehy's fence; red-metal disk in top of iron post (C. & G. S. b. m. H_{11})	4,546.287
Hammil, about 4 miles south of, 55 feet east of the track, 25 feet east of milepost 491; iron post stamped "4543 U. S. G. S." (C. & G. S. b. m. I_{11})	4,532.133
Shealy, about 4.06 miles south of, 0.35 mile south of milepost 495, 40 feet east of track; iron post stamped "4382" (U. S. G. S.) (C. & G. S. b. m. J_{11})	4,370.677
Chalfant, about 1.5 miles north of, 40 feet east of track, halfway between two telegraph poles; iron post stamped "4268 U. S. G. S." (C. & G. S. b. m. K_{11})	4,257.426
Chalfant, about 2 miles south of, 5.5 miles north of Laws, 35 feet west of track, 320 feet southwest of milepost 501; iron post stamped "4210 U. S. G. S." (C. & G. S. b. m. L_{11})	4,207.606

Primary leveling by C. W. Wardle in 1912 and D. H. Watson in 1913

From Chalfant north along Southern Pacific R. R. to Benton station (mean of 1912 and 1913 lines)

NOTE.—Many permanent bench marks along this line were recovered by the United States Coast and Geodetic Survey in 1915 and are described in the list immediately preceding this one.

	Feet
Chalfant, 200 feet north of station, 30 feet east of track, in base of milepost 499; railroad spike	4,232.80
Chalfant, 1.06 miles north of, at milepost 498	4,250.58
Chalfant, 2 miles north of, in base of milepost 497; railroad spike (top one)	4,266.14
Chalfant, 2.43 miles north of, at road crossing; top of rail	4,289.0
Shealy, 4.71 miles south of, in base of milepost 496; railroad spike (top one)	4,314.23
Shealy, 3.71 miles south of, in base of milepost 495; railroad spike	4,403.56
Shealy, 2.71 miles south of, in base of milepost 494; railroad spike	4,488.70
Shealy, 1.71 miles south of, in base of yellow pole, first one south of milepost 493; railroad spike	4,535.51
Shealy, 0.71 mile south of, in base of yellow pole, first one south of milepost 492; railroad spike	4,543.00
Shealy, 0.56 mile south of, at road crossing; top of rail	4,542.0
Shealy, at road crossing; top of rail	4,539.0
Hammil station, 3 miles south of, 50 feet east of track, in milepost 490; nail, marked "4547"	4,534.53
Hammil station, 3 miles south of, 50 feet east of track, in milepost 489; nail, marked "4559"	4,546.59
Hammil station, 1 mile south of, 50 feet east of track; at milepost 488, probably nail, marked "4567"	4,554.48
Hammil, 1 mile north of, in base of yellow pole, first one south of milepost 486; railroad spike	4,624.66
Hammil, 1.14 miles north of, at road crossing; top of rail	4,629.6
Benton station, 5.4 miles south of, at road crossing, near ranch house under bluff; top of rail	5,045.5
Benton station, 5 miles south of, in base of second pole south of milepost 481; railroad spike	5,084.2
Benton station, 3.3 miles south of, at road crossing; top of rail	5,242.0
Benton station, 2 miles south of, in base of first telegraph pole north of milepost 478; copper nail stamped "5306"	5,294.08
Benton station, 1 mile south of, in base of yellow telegraph pole, first one south of milepost 477; railroad spike	5,330.28

From Benton station north along Southern Pacific R. R. to California-Nevada line

Benton station, 1 mile north of, in milepost 475; railroad spike	5,433.68
Benton station, 2 miles north of, in milepost 474; railroad spike	5,484.43
Queen, 4.16 miles southwest of, in milepost 471; railroad spike	5,734.20
Queen, 2.35 miles southwest of, 0.35 mile southwest of Von Schmidt monument, 75 feet west of railroad, 5 feet west of rock cairn 59 on U. S. C. & G. S. State line; iron post stamped "5943 1913" [Recovered by U. S. C. & G. S. as S_{15}]	5,935.684

DEGREE QUADRANGLE 37°–38°, 119°–120°

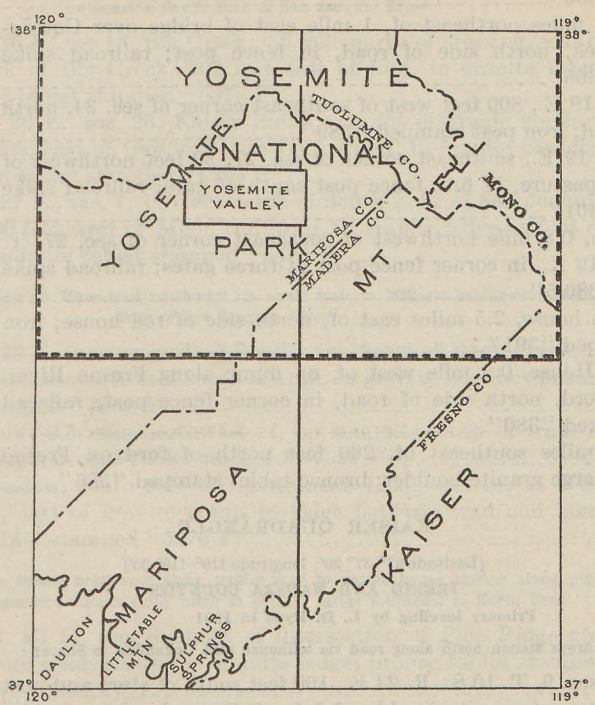


FIGURE 33.—Diagram of degree quadrangle 37°–38°, 119°–120°

DAULTON AND LITTLE TABLE MOUNTAIN QUADRANGLES

[Latitude 37°–37° 15′; longitude 119° 45′–120°]

MADERA COUNTY

Primary leveling by Roscoe Reeves in 1915

Near Daulton

	Feet
Daulton, 0.9 mile northwest of, on north gatepost to road east; railroad spike marked "431"	431. 36
Daulton, 150 feet north of station (see Bull. 481, p. 98); iron post stamped "400"	400. 690
Daulton, 0.77 mile southwest of, 180 feet northeast of railroad crossing, on telephone pole in northeast corner of T road forks east; railroad spike marked "388"	388. 66

From four corners 4 miles northeast of Madera along highway east and north to point 7 miles southeast of Daulton

Madera, 7.5 miles northeast of, 3.3 miles northeast of four corners, near southeast corner of T. 10 S., R. 18 E., on outside corner of L road east and southwest, in line of fence; iron post stamped "350"	350. 392

	Feet
Madera, 8 miles northeast of, 0.5 mile north of Cottonwood School; iron post stamped "342" (See Bull. 481, p. 96)	342. 928
Madera, 8.5 miles northeast of, on west end of south concrete safety wall of bridge over Cottonwood Creek; top of reinforcing bolt, painted "330"	330. 20
Madera, 9.5 miles northeast of, 1 mile east of bridge over Cottonwood Creek, north side of road, in fence post; railroad spike marked "365"	365. 35
T. 10 S., R. 19 E., 800 feet west of southeast corner of sec. 34, north side of road; iron post stamped "389"	389. 811
T. 10 S., R. 19 E., southeast corner of sec. 27, 50 feet northwest of corner of pasture, in first fence post south of gate; railroad spike marked "401"	401. 95
Adobe ranch, 0.8 mile northwest of southeast corner of sec. 27, T. 10 S., R. 19 E., in corner fence post at three gates; railroad spike marked "386.5"	387. 05
Adobe ranch house, 2.5 miles east of, north side of red house; iron post stamped "391"	391. 676
Twelvemile House, 0.5 mile west of, on flume along Fresno River, opposite ford, north side of road, in corner fence post; railroad spike marked "380"	380. 11
Daulton, 7 miles southeast of, 200 feet north of ford on Fresno River, in large granite boulder; bronze tablet stamped "386"	387. 342

KAISER QUADRANGLE

[Latitude 37°–37° 30′; longitude 119°–119° 30′]

FRESNO AND MADERA COUNTIES

Primary leveling by L. D. Ryus in 1901

From Humphreys station north along road via tollhouse and Ockenden to Shaver

	Feet
Pine Ridge, sec. 9, T. 10 S., R. 24 E., 100 feet south of store and post office, in top of granite boulder 5.5 by 8 feet; aluminum tablet stamped "4942 F"	4, 938. 832
Shaver, sec. 13, T. 9 S., R. 24 E., 150 feet north of mill and machine shop, in granite ledge; aluminum tablet stamped "5275 F" (on a single spur line)	5, 272. 031

From Music's old mill (Ockenden) over country road and trail via Markwood and Dinkey Creek Meadow to divide between Bear and Deer creeks on Kings River trail

T. 10 S., R. 25 E., sec. 12, 2.5 miles east of Markwood Meadow, 400 feet south of road east from Summit Meadow, in granite ledge; aluminum tablet stamped "6492 F"	6, 489. 098
Dinkey Creek Meadow, sec. 20, T. 10 S., R. 26 E., 50 feet south of road, 300 feet south of first cabin, about 0.5 mile west of bridge over Dinkey Creek and 300 feet south of south bank, in granite rock; aluminum tablet	5, 607. 984
Snow Corral, 4.5 miles east of Bear Creek, at point of hill, 50 feet north of trail, on east slope of hill west of meadow, 0.8 mile east of summit of ridge, in granite rock; aluminum tablet stamped "7118 F" (elevation by Tehipite levels from Kaweah 7,119.44)	7, 116. 258

From Dinkey Creek Meadow north along trail to mouth of Tamarack Creek

T. 9 S., R. 26 E., sec. 30, 1.7 miles north of Dry Meadows, east of trail, at summit of ridge, in granite ledge at curve; aluminum tablet stamped "7202 F"	7, 200. 424

Feet

T. 8 S., R. 25 E., sec. 35, Tamarack Creek, 150 feet from ford, west of Red Mountain trail, in granite boulder; aluminum tablet stamped "7141 F" 7, 149. 435

From mouth of Tamarack Creek via Mono trail and Mono Creek crossing to point 2.3 miles northeast of South Fork of San Joaquin River

T. 8 S., R. 26 E., sec 18, Big Creek, 0.6 mile north of crossing, east of north fork of Big Creek, 200 feet east of ford, in granite ledge; aluminum tablet stamped "6876 F" 6, 884. 169

T. 7 S., R. 26 E., sec. 26, Kaiser Ridge, summit of divide north of Kaiser Pass, east of trail, opposite Luck Point, in granite boulder; aluminum tablet stamped "9295 F" 9, 303. 091

T. 7 S., R. 27 E., sec. 7, 100 feet north of South Fork of San Joaquin River, 200 feet west of Mono trail ford, in granite ledge at foot of bluff; aluminum tablet stamped "6405 F" 6, 412. 856

From Mono Creek on Mono trail northwest via cattle trail, to Miller's bridge over Middle Fork of San Joaquin River[1]

T. 6 S., R. 26 E. (unsurveyed), 3.2 miles southeast of Rock Creek, in flat small meadow, 10 feet south of trail, in granite boulder; bronze tablet stamped "7061 F" 7, 069. 206

Bear Meadow, 0.5 mile northwest of, on summit, south of trail, in granite ledge; bronze tablet stamped "7554 F" 7, 562. 209

Cassidy Meadow, south side of Rattlesnake Lake, sec. 24, T. 5 S., R. 25 E., east of granite point, in ledge between trail and lake; bronze tablet stamped "5576 F" 5, 583. 919

From Tollhouse School northwest along public road to power house, thence along pipe line to reservoir, thence along ditch to point 2 miles southeast of North Fork

T. 10 S., R. 23 E., sec. 8, south of intersection of Pine Ridge and power-house roads, in top of granite ledge; bronze tablet stamped "2013 F" 2, 009. 891

T. 9 S., R. 23 E., sec. 18, San Joaquin light and power house, at northeast corner of building, in granite pillar; bronze tablet stamped "1013 F" 1, 009. 776

T. 8 S., R. 23 E., sec. 30, North Fork, 2 miles southeast of post office, west of road and ditch, at sharp curve above field and house, in granite boulder 10 by 8 feet; bronze tablet stamped "2503 F" 2, 500. 208

MARIPOSA QUADRANGLE

[Latitude 37°–37° 30′; longitude 119° 30′–120°]

MARIPOSA, MADERA, AND FRESNO COUNTIES

Primary leveling by L. F. Biggs in 1908

From point near Ahwahnee southeast along road to point 2 miles southeast of North Fork post office

Feet

Ahwahnee, 1.2 miles east of, 200 feet north of junction of Fresno Flats and Raymond roads, 30 feet west of road, in boulder; aluminum tablet stamped "2323 B 1908 B. K." 2, 320. 705

Ahwahnee, 2.2 miles southeast of, 15 feet west of road, at second-class road junction, in base of 30-inch pine tree; spike with aluminum tag stamped "2130 B. M. 38" 2, 127. 93

Fresno Flats, 2.7 miles west of, north of road, opposite ranch house, in base of 48-inch oak tree; spike with aluminum tag stamped "2209 B. M. 40" 2, 207. 40

[1] See under Mount Lyell quadrangle.

	Feet
Fresno Flats, 1.4 miles west of, 25 feet south of road, 300 feet south of ranch house, 500 feet east of bridge over small creek, in base of 48-inch oak tree; spike with aluminum tag stamped "2347 B. M. 41"	2, 345. 00
Fresno Flats, sec. 14, T. 7 S., R. 21 E., 50 feet east of China Creek, at fence, in granite boulder; aluminum tablet stamped "2271 B 1908 B. L."	2, 269. 058
Fresno Flats, 1.2 miles east of, south of road, north one of two pine trees, in base of 48-inch tree; spike with aluminum tag stamped "2599 B. M. 43"	2, 596. 84
Fresno Flats, 3.8 miles east of, north of road, 1.5 miles west of summit of ridge between Fresno Flats and Crane Valley, on granite boulder painted "3247 B. M. 46"; chisel point	3, 248. 62
Fresno Flats, 4.3 miles southeast of, 10 feet west of road, at road junction, 1 mile west of summit of ridge between Fresno Flats and Crane Valley, in granite boulder; aluminum tablet stamped "3508 B 1908 B. M."	3, 504. 948
Fresno Flats, 8.3 miles east of, 7 miles west of North Fork, 100 feet northeast of road, 150 feet south of creek, in base of 48-inch pine tree; spike with aluminum tag stamped "3324 B. M. 49"	3, 322. 19
North Fork, 6.7 miles northwest of, 100 feet north of road, 250 feet west of barn at San Joaquin Light & Power Co.'s dam No. 1, in boulder; aluminum tablet stamped "3317 B 1908 B. N."	3, 317. 158
North Fork, 5.9 miles west of, 150 feet south of south end of San Joaquin Light & Power Co.'s flume No. 4, on bridge over ditch, on concrete cap painted "3253"; chisel point	3, 251. 09
North Fork, 4.3 miles northwest of, 200 feet west of flume, 50 feet north of road, in base of 48-inch pine tree; spike with aluminum tag stamped "3210 B. M. 52"	3, 207. 69
North Fork, 2.5 miles northwest of, northeast corner of San Joaquin Light & Power Co.'s power house, in foundation; aluminum tablet stamped "2827 B 1908 B. O."	2, 825. 171
North Fork, 1.7 miles northeast of, at headquarters of Sierra National Forest, 250 feet southeast of office, in base of 40-inch oak tree; spike with aluminum tag stamped "2951 B. M. 53"	2, 949. 19
North Fork, 500 feet northeast of post office, on Sierra National Forest line, corner of saloon, in granite boulder; aluminum tablet stamped "2642 B 1908 B. P."	2, 639. 377
North Fork, 2 miles southeast of; bronze tablet stamped "2503 F"	2, 499. 388
From point 1.2 miles southeast of North Fork post office southwest to Pollasky	
North Fork, 2.8 miles southwest of, south of road, 25 feet west of road junction, in base of 30-inch oak tree; spike with aluminum tag stamped "2894 B. M. 57"	2, 891. 78
North Fork, 5.4 miles southwest of, north of road, at junction of Crane Valley-North Fork roads, in base of 36-inch oak tree; spike with aluminum tag stamped "2653 B. M. 60"	2, 650. 59
North Fork, 6 miles southwest of, west edge of road, 3.4 miles southeast of Cleveland District School, 600 feet east of ranch house, in granite boulder; aluminum tablet stamped "2586 B 1908 B. Q."	2, 583. 663
North Fork, 8.2 miles southwest of, west of road, 1,000 feet north of ranch house, in fence corner, in base of 36-inch oak tree: spike with aluminum tag stamped "1955 B. M. 62"	1, 952. 57
Oneals, 6.3 miles northeast of, 25 feet west of road, 200 feet west of Mountain View School, in granite boulder; aluminum tablet stamped "1305 B 1908 B. R."	1, 302. 138

	Feet
Oneals, 3.9 miles northeast of, at central station, 100 feet south of house, in base of 36-inch pine tree; spike with aluminum tag stamped "1250 B. M. 66"	1, 247. 41
Oneals, 2.8 miles northeast of, west of road, 100 feet west of junction of road, in base of 24-inch oak tree; spike with aluminum tag stamped "1387 B. M. 67"	1, 384. 20
Oneals, 0.5 mile west of, 200 feet north of Oneals ranch house, at intersection of roads, in granite boulder; aluminum tablet stamped "1246 B 1908 B. S."	1, 243. 545
Oneals, 2.8 miles southwest of, on summit of Cop Hill, on granite boulder painted "1336 B. M. 71;" chisel point	1, 333. 46
Oneals, 5.8 miles southwest of, 6 miles north of Pollasky, 150 feet southeast of intersection of Pollasky and Madera roads, in granite boulder; aluminum tablet stamped "611 B 1908 B. T."	608. 970
Pollasky, 3 miles north of, 100 feet southeast of pump, 30 feet south of road, in base of 36-inch cottonwood tree; spike with aluminum tag stamped "418 B. M. 76"	415. 42
Pollasky, northeast corner of bridge over San Joaquin River, on concrete guard, 5 feet from fence corner; aluminum tablet stamped "U"	330. 864
Pollasky, 450 feet south of station, opposite milepost 231, at east edge of right of way of railroad; iron post stamped "337"	339. 985

From Daulton southeast to point 6 miles west of Pollasky, thence to point 2.3 miles north of Pollasky

Daulton, 150 feet north of station, west edge of railroad right of way, 10 feet south of gate, iron post stamped "400 B 1908 B. X."	400. 687
Daulton, 3.1 miles southeast of, west of road, at gate to Daulton ranch, on main road between Raymond and Berenda, 15 feet north of gate, on fence line; iron post stamped "561 B 1909 B. E. 1"	561. 662
Daulton, 7 miles southeast of, 300 feet south of head of irrigation ditch, 60 feet west of Fresno River, 200 feet north of ford, in granite boulder; aluminum tablet stamped "386 B 1909 B. F. 1"	387. 342
Fresno River ford at Adobe ranch, 1.8 miles southeast of, 0.7 mile north of red house, 60 feet north of second-class road, northwest of triangulation station; on boulder painted "419 B. M. 110;" chisel point	419. 62
Fresno River ford at Adobe ranch, 2.5 miles southeast of, 350 feet northwest of triangulation station, on second-class road, 0.5 mile west of large barn, 10 feet south of gate to field; iron post stamped "471 B 1909 B. G. 1"	471. 213
Fresno River ford at Adobe ranch, 12 miles southeast of, 1 mile east of Adobe triangulation station, 25 feet west of creek at old house, on boulder painted "446 B. M. 112"; chisel point	446. 33
Pollasky, 6.2 miles west of, 75 feet north of corner of small pasture, at rocky point south of road; iron post stamped "451"	452. 015
Pollasky, 6 miles west of, 150 feet south of fence corner at intersection of roads, driven in crack in granite boulder painted "466 B. M. 80;" spike	468. 60
Pollasky, 4.9 miles west of, 20 feet east of road, in base of fence post painted "535 B. M. 17"; spike (redetermined Ryus bench mark)	535. 828
Pollasky, 4.4 miles west of, 500 feet west of schoolhouse, 5 feet south of road, on granite boulder painted "503 B. M. 79"; chisel point	506. 41
Pollasky, northeast corner of bridge over San Joaquin River, on concrete guard, 5 feet from fence corner; aluminum tablet stamped "U"	330.864

From Daulton northeast along railroad and highway to Ahwahnee

	Feet
Daulton, in front of station; top of rail	401. 0
Daulton, 150 feet north of station, west edge of railroad right of way, 10 feet south of gate; iron post stamped "400 B 1909 B. X."	400. 687
Jesbel station, 25 feet south of milepost 192, west edge of railroad right of way; iron post stamped "527 B 1909 B. Y."	527. 515
Raymond, 2.7 miles south of, at railroad crossing, west edge of road, in granite boulder; aluminum tablet stamped "864 B 1909 B. Z."	864. 348
Raymond, in front of station; top of rail	925. 8
Raymond, 20 feet south of Raymond livery stable, opposite station, west edge of road, in granite boulder; aluminum tablet stamped "936 B 1909 B. A. 1"	937. 713
Raymond, 1.2 miles north of, west side of road, in base of 24-inch oak tree; spike with aluminum tag stamped "1053 B. M. 91"	1, 054. 25
Raymond, 1.9 miles north of, at intersection of road to Fresno Flats, 200 feet south of house, in base of 30-inch oak tree; spike with aluminum tag stamped "1263 B. M. 92"	1, 264. 62
Raymond, 2.7 miles north of, at intersection of roads, at rocky point, on granite boulder painted "1257 B. M. 93"; chisel point	1, 258. 70
Raymond, 5 miles north of, 2.7 miles south of Summit House, at small draw, east of road, in granite boulder; aluminum tablet stamped "1356 B 1909 B. B. 1"	1, 356. 195
Raymond, 6 miles north of, 1.6 miles south of Summit House, 25 feet east of road, in base of 30-inch oak tree; spike with aluminum tag stamped "1632 B. M. 95"	1, 632. 73
Raymond, 8 miles north of, 0.3 mile north of Summit House, on summit of ridge, west edge of road, in granite boulder; aluminum tablet stamped "2042 B 1909 B. C. 1"	2, 042. 360
Grub Gulch, 2.7 miles south of, on summit of ridge, east edge of road, in base of 20-inch oak tree; spike with aluminum tag stamped "1992 B. M. 99"	1, 992. 59
Grub Gulch, 1.3 miles south of, west side of road, 50 feet west of fence corner, in base of 36-inch pine tree; spike with aluminum tag stamped "2154 B. M. 100"	2, 154. 36
Grub Gulch, 0.3 mile north of, on summit of ridge between Grub Gulch and Ahwahnee, 2,000 feet south of old McCloud ranch, south side of road at bend, in granite boulder; aluminum tablet stamped "2495 B 1909 B. D. 1"	2, 495. 225
Grub Gulch, 1.7 miles north of, 300 feet west of old house, at bend in road, 150 feet south of draw, in base of 36-inch oak tree; spike with aluminum tag stamped "2257 B. M. 102"	2, 257. 2
Grub Gulch, 3.9 miles north of, at junction of Poisior Switch and Ahwahnee roads, 50 feet west of road, on granite boulder painted "1943 B. M. 104"; chisel point	1, 943. 32

From Mount Bullion School east along road to Ahwahnee

Mount Bullion, 200 feet east of schoolhouse, 30 feet north of road; iron post stamped "2177 B 1908 B. E."	2, 175. 756
Mount Bullion, 2.4 miles east of, north side of road, in base of 36-inch pine tree; spike with aluminum tag stamped "2332 B. M. 17"	2, 330. 68
Mariposa, 0.7 mile west of, 400 feet west of cemetery, 20 feet south of road, on boulder painted "2049 B. M. 20"; chisel point	2, 046. 89
Mariposa, at courthouse, southeast corner of Hall of Records, 4 feet above ground; aluminum tablet stamped "2022 B 1908 B. F."	2, 019. 467

	Feet
Mariposa, 2.2 miles east of, 300 feet west of Mormon Bar Hotel, south of road, on boulder painted "1767 B. M. 22"; chisel point	1, 765. 77
Mormon Bar, 2.3 miles east of, 1.5 miles west of Bootjack, 40 feet north of road, 300 feet west of summit of hill, in boulder; aluminum tablet stamped "2456 B 1908 B. G."	2, 454. 436
Bootjack, 0.2 mile east of, at intersection of Yosemite and Hites Cove roads, in base of 48-inch oak tree; spike with aluminum tag stamped "2244 B. M. 25"	2, 242. 47
Bootjack, 2.6 miles east of, 150 feet north of road junction, at Thompson ranch, 10 feet west of road, in large boulder; aluminum tablet stamped "2232 B 1908 B. H."	2, 228. 614
Bootjack, 4.6 miles east of, 60 feet west of road, on summit of ridge between Bootjack and Chowchilla, on large boulder painted "2976 B. M. 28"; chisel point	2, 974. 17
Bootjack, 6.1 miles east of, 0.9 mile west of Chowchilla School, south of road at ranch house, east bank of creek, in base of 40-inch pine tree; spike with aluminum tag stamped "2820 B. M. 30"	2, 817. 98
Chowchilla School, 0.3 mile east of, 50 feet south of intersection of Wawona and Warwane roads, 100 feet north of barn, in boulder; aluminum tablet stamped "2963 B 1908 B. I."	2, 961. 032
Chowchilla School, 2.4 miles east of, 1.5 miles west of Grants Springs, 50 feet east of Chowchilla Creek, opposite ranch house, in base of 36-inch oak tree; spike with aluminum tag stamped "2296 B. M. 32"	2, 293. 62
Grants Springs, midway between spring house and old house, in base of 30-inch cedar tree; spike with aluminum tag stamped "2872 B. M. 33"	2, 869. 39
Ahwahnee, 3.1 miles west of, 150 feet west of road, on summit between Grants Springs and Ahwahnee, in boulder; aluminum tablet stamped "3336 B 1908 B. J."	3, 333. 846
Ahwahnee, 1.9 miles west of, at junction of road to Summerdale and Miami sawmill and Raymond road, in base of 36-inch oak tree; spike with aluminum tag stamped "2928 B. M. 35"	2, 926. 53
Ahwahnee, 1.2 miles west of, west side of road, at junction of second-class road, on boulder painted "2800 B. M. 36"; chisel point	2, 798. 42
Ahwahnee, 1.2 miles east of, 200 feet north of junction of Fresno Flats and Raymond roads, 30 feet west of road, in boulder; aluminum tablet stamped "2323 B 1908 B. K." (junction bench mark)	2, 320. 705

MOUNT LYELL QUADRANGLE

[Latitude 37° 30′–38°: longitude 119°–119° 30′]

TUOLUMNE, MONO, MADERA, MARIPOSA, AND FRESNO COUNTIES

Primary leveling by C. R. Smith in 1898 and C. M. Weston in 1909

From Mono post office southeast to Rush Creek

	Feet
Ney's ranch, sec. 4, T. 1 N., R. 26 E., near Mono Lake shore, on north side of road, 200 feet east of blacksmith shop; in large boulder; aluminum tablet stamped "6423 O"	6, 426. 549
T. 1 N., R. 26 E., sec. 13, Rush Creek crossing, junction of lake road with Rush Creek road from Farrington station; iron post stamped "6442 O"	6, 445. 798

From Ney's ranch (shore of Lake Mono) south along road to junction of road in sec. 9, T. 2 S., R. 27 E.

Farrington station, T. 1 N., R. 26 E., northeast corner of sec. 33, 50 feet south of dwelling, inside fence at edge of road to Walker Lake; iron post stamped "6854 O"	6, 858. 820

	Feet
T. 1 S., R. 27 E., sec. 29, Owens River road, 7 miles southeast of Farrington station, at head of short steep grade, at upper edge of grove of trees, 10 feet left of road; iron post stamped "7601 O"	7, 605. 593
T. 2 S., R. 27 E., sec. 9, at junction of Long Valley and Owens River road with Bodie and Benton wagon road, on north side of road; iron post stamped "7938 O"	7, 942. 497
From Farrington south to Silver Lake. (Single spur line)	
Grant Lake, at outlet, 10 feet east of road; iron post stamped "7068 O"	7, 073. 587
Silver Lake, at outlet; iron post stamped "7207 O"	7, 221. 356
Silver Lake; surface of water, Aug. 25, 1898	7, 216. 5
Grant Lake; surface of water, Aug., 1898	7, 069. 2
From Ney's ranch up Leevining Creek road to sec. 23, T. 1 N., R. 26 E.	
T. 1 N., R. 25 E., quarter corner between secs. 23 and 24; iron post stamped "7467 O"	7, 470. 503
From Farrington southwest along road and trail to Mono Pass, thence west along trail to Snow Flat	
Walker Lake, 100 feet north of outlet, at upper end of wagon road where Bloody Canyon trail begins, near dwelling of A. Grose, 100 feet from lake and 123 feet from fence; iron post stamped "7929 O"	7, 934. 121
Walker Lake; surface of water, September 1, 1898	7, 931. 8
Sardine Lake; surface of water, September 26, 1898	9, 881. 1
Mono Pass, 30 feet north from shore of Summit Lake and 4 feet to right of trail; iron post stamped "10599 O"	10, 603. 695
Dana Fork, trail at point where sheep trail branches to right through timber alongside hill and where stream turns west to main trail, continuing northwest down to meadows, in rock at southwest corner of cabin; aluminum plug stamped "U. S. G. S. 9738 Ft. B. M. O."	9, 742. 634
Soda Springs, 3.5 miles east of, on north side of Tioga road where trail comes in from the meadows east of road, in ledge of rock; aluminum bolt stamped "U. S. G. S. 9270 Ft. B. M. O."	9, 274. 865
Soda Springs, 100 feet west of, in large granite boulder on south side of trail; aluminum bolt stamped "U. S. G. S. 8594 Ft. B. M. O."	8, 598. 752
T. 1 S., R. 23 E., southeast corner of sec. 1, Diablo meridian; iron post stamped "8555 O"	8, 560. 189
Cathedral Creek, in conspicuous rock in north side of creek bed, 50 feet from road; aluminum bolt stamped "U. S. G. S. 8337 Ft. B. M. O."	8, 342. 246
Lake Tenaya, on west shore of, about 300 feet east of three log cabins in grove of trees, in large boulder between road and lake shore; aluminum tablet stamped "U. S. G. S. 8146 Ft. B. M. O."	8, 150. 618
Lake Tenaya; surface of water, September 17, 1898	8, 146
Snow Flat, 300 feet southwest of wooden culvert in road crossing, in large granite boulder, on west side of road; aluminum tablet stamped "U. S. G. S. 8705 Ft. B. M. O." (recovered in 1905 by leveling from Merced, and correction made)	8, 710. 512
From Dana Fork trail north to Tioga. (Single spur line)	
Tioga Pass summit, on rock on east side of road; aluminum tablet stamped "9941 Ft. B. M. O."	9, 946. 257
Tioga mine, at southwest corner of assay office, in ledge of rock; round iron plug set in cement and marked "9795"	69, 799. 81

At Miller Bridge

	Feet
Miller Bridge, sec. 11, T. 5 S., R. 25 E., 15 feet east of bridge over Middle Fork of San Joaquin River, in granite ledge; bronze tablet stamped "4556 F"	4, 563. 752

YOSEMITE QUADRANGLE

[Latitude 37° 30′–38°; longitude 119° 30′–120°]

TUOLUMNE, MARIPOSA, AND MADERA COUNTIES

Primary leveling by C. H. Semper and R. A. Farmer in 1905

From point near Bower Cave southeast to Merced River, thence easterly along same to Yosemite Valley

	Feet
Kinsley, on south side of road, at fence line, directly opposite post office; iron post stamped "2715 B"	2, 715. 428
Jenkins Mountain, summit of mountain, on trail, 15 feet south of large oak tree; iron post stamped "3289 B"	3, 289. 479
Jenkins Mountain, at east foot of, 145 feet west of Big Grizzly Creek, 130 feet north of Merced River, 30 feet east of old cabin, at edge of trail; aluminum tablet stamped "1324 B" [1]	1, 324. 201
Ned Gulch, 1.9 miles east of, 0.5 mile east of junction of South Fork with river, on long flat ground, at foot of slope, north side of large rock; aluminum tablet stamped "1425 B"	1, 425. 422
Furgeson mine, 2.2 miles east of, 2 feet south of bridge over Merced River, west abutment, 20 feet east of west end; aluminum tablet stamped "1586 B"	1, 586. 348
Merced River bridge, 2.5 miles east of, at west foot of steep grade, in open ground covered with boulders, 35 feet east of trail, large granite rock, in river face; aluminum tablet stamped "1824 B"	1, 824. 406
Crane Creek, 0.8 mile east of, trail nearly level with river, 95 feet west of common corner of secs. 9, 10, 15, and 16, T. 3 S., R. 20 E., 10 feet east of large crooked oak, perpendicular rock; aluminum tablet stamped "2117 B"	2, 117. 409
Crane Creek, 2.4 miles east of, 260 feet north of zigzag in trail close to river; in face of perpendicular rock; aluminum tablet stamped "2738 B"	2, 738. 441
Cascade House, 0.7 mile south of, on main road, 100 feet southwest of junction of road with river trail, in face of perpendicular rock; aluminum tablet stamped "3511 B"	3, 511. 421
Yosemite, 50 feet west of west boundary stake of old State park, on north side of road to Cascade Falls, large granite boulder; aluminum tablet stamped "3576 B"	3, 576. 444
Yosemite Valley, north side of river, at west turn to bridge near edge of road, 75 feet northwest of Pohono Bridge, in large boulder; aluminum tablet stamped "3880 B"	3, 880. 207
Yosemite Valley, directly opposite Guardian's office, at east margin of road, top of large granite rock; aluminum tablet stamped "3964 B"	3, 964. 727
Yosemite Valley, at junction of roads, north side of river, north and east side of roads, 150 feet northeast of iron bridge over Merced River, at Sentinel Hotel, in center of top of concrete pier 2.5 feet high, base 20 by 20 inches, and top 12 by 12 inches; aluminum plug stamped with a triangle and "U. S. G. S."	3, 960. 536

[1] From this point the old system of double rod was used.

	Feet
Immediately over the above bench mark is a rectangular aluminum plate half an inch thick, marked "Charles D. Walcott, Director, U. S. Geological Survey, latitude 37° 44′ 40″, longitude 119° 35′ 21″	3, 960. 578
Yosemite Valley, at power house, 40 feet south of trail to Vernal Falls, 40 feet north of power-house bridge, 30 feet north of road, in large granite boulder; aluminum tablet stamped "4034 B"	4, 034. 501

Up Yosemite Falls trail northeast to Snow Flat

Yosemite Valley, at foot of trail to Yosemite Falls, 100 feet west of road, 30 feet south of trail, in face of large granite boulder; aluminum tablet stamped "3989 B"	3, 989. 453
Yosemite Valley, south of trail to Yosemite Falls, in rock; aluminum tablet stamped "F 1905 5031"	5, 031. 016
Yosemite Valley, in angle of trail to Yosemite Falls, 100 feet from large flat rock used as lookout to bottom of falls, top of large granite rock; aluminum tablet stamped "5143 B"	5, 143. 106
Yosemite Valley, top of Yosemite Falls, east side of bridge over Yosemite Creek, south side of rock foundation of abutment; aluminum tablet stamped "6603 B"	6, 603. 496
Yosemite Point, at west end of iron railing; triangulation tabiet	6, 935. 056
Summit north of trail, in rock 5 feet base, 3 feet high; aluminum tablet stamped "F 7852 1905"	7, 852. 205
Junction of trail with Tioga wagon road, south of, on rock 3 by 3 by 3 feet; aluminum tablet stamped "7981 F"	7, 981. 453

SURVEY OF FLOOR OF YOSEMITE VALLEY

Primary traverse by A. T. Fowler, chief of party, in 1919; primary leveling by A. T. Fowler and L. S. Leopold in 1919

From Valley triangulation station along highways southeast to Happy Isles Bridge

VALLEY TRIANGULATION STATION

In Yosemite Valley, on north side of junction of roads to Camp Yosemite and Mirror Lake, about 50 yards from bridge over Merced River, near Sentinel Hotel.

Signal: A 4 by 4 inch post set in ground, with signboard pointing to Mirror Lake on it. Another board at right angles to signboard and post.

Station mark: A concrete pier 2½ feet high, 20 by 20 inches at base, 12 by 12 inches at top, in top of which was placed an aluminum bolt marked "△ U. S. G. S. B. M." Elevation, 3,960.138 feet.

[Latitude 37° 44′ 39.81″; longitude 119° 35′ 20.80″]

Station No. 1, at northwest corner of driveway to Oak Cottage, south side of road, opposite Sentinel Hotel; center of valve stem on small water spigot painted white. Elevation, 3,962.182 feet.

[Latitude 37° 44′ 36.46″; longitude 119° 35′ 22.37″]

To station—	Azimuth	Distance
	° ′	*Feet*
Valley	200 24	361. 2
Station No. 2	265 59	220. 0

Station No. 2, north side of road, 7 feet south of 4-foot pine tree, in ground; nail. Elevation, 3,962.46 feet.

[Latitude 37° 44′ 36.62″; longitude 119° 35′ 19.64″]

To station—	Azimuth	Distance
	° ′	*Feet*
Station No. 1	85 59	220.0
Station No. 3	281 43	195.7

Station No. 3, north side of road, 3 feet east of 12-inch cedar tree, 20 feet west of manhole; painted spot on boulder. Elevation, 3,960.68 feet.

[Latitude 37° 44′ 36.22″; longitude 119° 35′ 17.25″]

To station—	Azimuth	Distance
	° ′	*Feet*
Station No. 2	101 43	195.7
Station No. 4	305 06	378.5

Station No. 4, 12 feet south of road, in root of 12-inch pine tree; copper nail; figure "4" painted on tree. Elevation, 3,957.24 feet.

[Latitude 37° 44′ 34.07″; longitude 119° 35′ 13.40″]

To station—	Azimuth	Distance
	° ′	*Feet*
Station No. 3	125 06	378.5
Station No. 5	269 21	505.0

Station No. 5, north side of road, 3.5 feet south of retaining wall along river; spike in ground. Elevation, 3,959.87 feet.

[Latitude 37° 44′ 34.13″; longitude 119° 35′ 07.11″]

To station—	Azimuth	Distance
	° ′	*Feet*
Station No. 4	89 21	505.0
Station No. 6	293 11	400.0

Station No. 6, south side of road; spike in ground. Elevation, 3,959.92 feet.

[Latitude 37° 44′ 32.57″; longitude 119° 35′ 02.53″]

To station—	Azimuth	Distance
	° ′	*Feet*
Station No. 5	113 11	400.0
Station No. 7	278 06	330.2

Station No. 7, north side of road, in root of oak tree; nail. Elevation, 3,964.79 feet.

[Latitude 37° 44′ 32.11″; longitude 119° 34′ 58.46″]

To station—	Azimuth	Distance
	° ′	*Feet*
Station No. 6	98 06	330.2
Station No. 8	289 53	371.3

Station No. 8, omitted; line run direct from No. 7 to No. 9.

Station No. 9, at northwest corner of intersection of road to gravel bar with main road; center of paint mark on rock. Elevation, 3,961.52 feet.

[Latitude 37° 44′ 30.86″; longitude 119° 34′ 54.12″]

To station—	Azimuth	Distance
	° ′	*Feet*
Station No. 7	109 53	371.3
Station No. 10	317 29	174.4

Station No. 10, south side of road, in root of large pine tree; nail. Elevation 3,967.70 feet.

[Latitude 37° 44′ 29.59″; longitude 119° 34′ 52.65″]

To station—	Azimuth	Distance
	° ′	*Feet*
Station No. 9	137 29	174.4
Station No. 11	285 11	276.1

Station No. 11, north side of road, in root of oak tree; nail. Elevation, 3,975.31 feet.

[Latitude 37° 44′ 28.87″; longitude 119° 34′ 49.34″]

To station—	Azimuth	Distance
	° ′	*Feet*
Station No. 10	105 11	276.1
Station No. 12	288 05	415.0

Station No. 12, on top of large pine stump, north side of road; nail in painted circle. Elevation, 3,975.82 feet.

[Latitude 37° 44′ 27.60″; longitude 119° 34′ 44.42″]

To station—	Azimuth	Distance
	° ′	*Feet*
Station No. 11	108 05	415.0
Station No. 13	315 12	699.5

Station No. 13, at north end of culvert No. 355, on small projecting rock near top of guard wall; painted mark. Elevation, 3,985.46 feet.

[Latitude 37° 44′ 22.69″; longitude 119° 34′ 38.29″]

To station—	Azimuth	Distance
	° ′	*Feet*
Station No. 12	135 12	699.5
Station No. 14	309 12	355.0

Station No. 14, north side of road, between road and foot path, 10 feet east of entrance to Ledge trail; paint mark on rock. Elevation, 3,983.06 feet.

[Latitude 37° 44′ 20.47″; longitude 119° 34′ 34.86″]

To station—	Azimuth	Distance
	° ′	*Feet*
Station No. 13	129 12	355.0
Station No. 15	291 13	658.3

Station No. 15, south side of road, at west end of Camp Curry, in root of pine tree; nail. Elevation, 3, 981.13 feet.

[Latitude 37° 44′ 18.12″; longitude 119° 34′ 27.23″]

To station—	Azimuth		Distance
	°	′	*Feet*
Station No. 14	111	13	658.3
Station No. 16	277	01	192.2

Station No. 16, south side of road, near west end of Camp Curry, in east end of south guard wall of culvert No. 357; bronze tablet stamped. Elevation, 3,983.299 feet.

[Latitude 37° 44′ 17.89″; longitude 119° 34′ 24.85″]

To station—	Azimuth		Distance
	°	′	*Feet*
Station No. 15	97	01	192.2
Station No. 17	275	25	727.7

Station No. 17, south side of road, 40 feet east of main entrance to Camp Curry, in root of very large pine tree; spike. Elevation, 3,979.97 feet.

[Latitude 37° 44′ 17.21″; longitude 119° 34′ 15.83″]

To station—	Azimuth		Distance
	°	′	*Feet*
Station No. 16	95	25	727.7
Station No. 18	270	35	970.7

Station No. 18, in triangle at junction of Mirror Lake and Happy Isles roads, near east end of Camp Curry; 1-inch gas pipe. Elevation, 3,980.10 feet.

[Latitude 37° 44′ 17.11″; longitude 119° 34′ 03.76″]

To station—	Azimuth		Distance
	°	′	*Feet*
Station No. 17	90	35	970.0
Station No. 19	296	33	340.0

Station No. 19, in north wall of culvert; painted point on rock. Elevation, 3,981.76 feet.

[Latitude 37° 44′ 15.60″; longitude 119° 33′ 59.98″]

To station—	Azimuth		Distance
	°	′	*Feet*
Station No. 18	116	33	340.0
Station No. 20	321	32	717.0

Station No. 20, south side of road, in root of oak tree; copper nail. Elevation, 3,986.96 feet.

[Latitude 37° 44′ 10.05″; longitude 119° 33′ 54.42″]

To station—	Azimuth		Distance
	°	′	*Feet*
Station No. 19	141	32	717.0
Station No. 21	324	34	250.5

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Station No. 21, north side of road, in top of small pine stump; copper nail. Elevation, 3,989.10 feet.

[Latitude 37° 44′ 08.04″; longitude 119° 33′ 52.62″]

To station—	Azimuth	Distance
	° ′	*Feet*
Station No. 20	144 34	250.5
Station No. 22	303 53	285.7

Station No. 22, south side of road, at culvert No. 362, in wall along road; white painted point on rock. Elevation, 3,993.08 feet.

[Latitude 37° 44′ 06.46″; longitude 119° 33′ 49.66″]

To station—	Azimuth	Distance
	° ′	*Feet*
Station No. 21	123 53	285.7
Station No. 23	291 39	390.3

Station No. 23, north side of road, 3.5 feet north of pine tree; painted point on top of small boulder. Elevation, 4,002.24 feet.

[Latitude 37° 44′ 05.04″; longitude 119° 33′ 45.15″]

To station—	Azimuth	Distance
	° ′	*Feet*
Station No. 22	111 39	390.3
Station No. 24	309 34	657.6

Station No. 24, north side of road, directly on road line, in root of 4-foot pine tree; spike. Elevation, 4,012.02 feet.

[Latitude 37° 44′ 00.89″; longitude 119° 33′ 38.84″.]

To station—	Azimuth	Distance
	° ′	*Feet*
Station No. 23	129 34	657.6
Station No. 25	303 55	173.9

Station No. 25, south side of road, 60 feet east of watering trough; painted point on rock. Elevation, 4,017.11 feet.

[Latitude 37° 43′ 59.93″; longitude 119° 33′ 37.04″]

To station—	Azimuth	Distance
	° ′	*Feet*
Station No. 24	123 55	173.9
Station No. 26	311 37	211.4

Station No. 26, south side of road, on rock at south end of culvert; painted point. Elevation, 4,019.37 feet.

[Latitude 37° 43′ 58.55″; longitude 119° 33′ 35.08″]

To station—	Azimuth	Distance
	° ′	*Feet*
Station No. 25	131 37	211.4
Station No. 27	288 01	209.1

Station No. 27, north side of road, in root of 3-foot oak tree; copper nail. Elevation, 4,018.92 feet.

[Latitude 37° 43′ 57.91″; longitude 119° 33′ 32.60″]

To station—	Azimuth	Distance
	° ′	*Feet*
Station No. 26	108 01	209.1
Station No. 28	337 56	595.5

Station No. 28, at bend in road between old power house and Happy Isles bridge, 15 feet north of tree with fire tools, in root of tree nearly flush with ground; spike. Elevation, 4,030.76 feet.

[Latitude 37° 43′ 52.45″; longitude 119° 33′ 29.82″]

To station—	Azimuth	Distance
	° ′	*Feet*
Station No. 27	157 56	595.5
Station No. 29	263 03	166.0

From Happy Isles bridge north along highways to Tenaya bridge

Yosemite Valley, at power house, 40 feet south of trail to Vernal Falls, 40 feet north of power-house bridge, 30 feet north of road, large granite boulder; aluminum tablet stamped "4,034 B" (Bull. 342, p. 117). Elevation, 4,034.061 feet.

Station No. 29, east side of road, at sprinkler station north of Happy Isles bridge, at starting point of trail to Vernal Falls; painted point on rock. Elevation, 4,030.09 feet.

[Latitude 37° 43′ 52.65″; longitude 119° 33′ 27.77″]

To station—	Azimuth	Distance
	° ′	*Feet*
Station No. 28	83 03	166.0
Station No. 30	191 40	468.4

Station No. 30, west side of road, 7.8 feet west of 3-foot cedar tree; painted point on rock. Elevation, 4,022.13 feet.

[Latitude 37° 43′ 57.18″; longitude 119° 33′ 26.59″]

To station—	Azimuth	Distance
	° ′	*Feet*
Station No. 29	11 40	468.4
Station No. 31	196 39	531.1

Station No. 31, west side of road, 10 feet east of 2-foot oak tree, in root of tree; spike. Elevation, 4,014.12 feet.

[Latitude 37° 44′ 02.21″; longitude 119° 33′ 24.69″]

To station—	Azimuth	Distance
	° ′	*Feet*
Station No. 30	16 39	531.1
Station No. 32	198 23	534.7

Station No. 32, east side of road, 14.5 feet west of arrow painted on rock, at top of bank; painted point on rock. Elevation, 4,010.20 feet.

[Latitude 37° 44′ 07.23″; longitude 119° 33′ 22.60″]

To station—	Azimuth	Distance
	° ′	*Feet*
Station No. 31	18 23	534.7
Station No. 33	153 31	329.2

Station No. 33, west side of road, 1.4 feet east of 2½-foot oak tree; painted point on rock. Elevation, 4,013.03 feet.

[Latitude 37° 44′ 10.14″; longitude 119° 33′ 24.43″]

To station—	Azimuth	Distance
	° ′	*Feet*
Station No. 32	333 31	329.2
Station No. 34	163 19	310.5

Station No. 34, west side of road, 8.4 feet east of 10-inch cedar tree; painted point on rock. Elevation, 3,999.74 feet.

[Latitude 37° 44′ 15.17″; longitude 119° 33′ 25.16″]

To station—	Azimuth	Distance
	° ′	*Feet*
Station No. 33	343 19	310.5
Station No. 35	188 14	213.0

Station No. 35, east side of road, 2 feet west of 10-inch fir tree; copper nail in small stump. Elevation, 3,993.41 feet.

[Latitude 37° 44′ 15.17″; longitude 119° 33′ 25.16″]

To station—	Azimuth	Distance
	° ′	*Feet*
Station No. 34	8 14	213.0
Station No. 36	147 57	384.1

Station No. 36, west side of road, in 10-inch cedar tree; painted point on rock. Elevation, 4,009.74 feet.

[Latitude 37° 44′ 18.38″; longitude 119° 33′ 27.70″]

To station—	Azimuth	Distance
	° ′	*Feet*
Station No. 35	327 57	384.4
Station No. 37	188 17	170.1

Station No. 37, east side of road, 42 feet north of 3-inch cedar tree; painted point on rock. Elevation, 4,008.47 feet.

[Latitude 37° 44′ 10.05″; longitude 119° 33′ 27.39″]

To station—	Azimuth	Distance
	° ′	*Feet*
Station No. 36	8 17	170.1
Station No. 38	129 53	342.8

Station No. 38, east side of road, in root of small pine tree; copper nail. Elevation, 3,990.07 feet.

[Latitude 37° 44′ 22.22″; longitude 119° 33′ 30.67″]

To station—	Azimuth	Distance
	° ′	*Feet*
Station No. 37	309 53	342.8
Station No. 39	112 59	272.4

Station No. 39, triangle at junction of road from Happy Isles to Mirror Lake, with road from Camp Curry to Mirror Lake, 8 feet east of west point of triangle; 1 inch pipe driven in ground. Elevation, 3,979.35 feet.

[Latitude 37° 44′ 23.27″; longitude 119° 33′ 33.79″]

To station—	Azimuth	Distance
	° ′	*Feet*
Station No. 38	292 59	272.4
Station No. 40	214 47	390.7

Station No. 40, east side of road, 2 feet west of 10-inch pine tree, in root; copper nail. Elevation, 3,980.78 feet.

[Latitude 37° 44′ 26.44″; longitude 119° 33′ 31.01″]

To station—	Azimuth	Distance
	° ′	*Feet*
Station No. 39	34 47	390.7
Station No. 41	174 40	360.4

Station No. 41, north side of road at abrupt bend to east in road; painted point on rock. Elevation, 3,984.39 feet.

[Latitude 37° 44′ 29.99″; longitude 119° 33′ 31.43″]

To station—	Azimuth	Distance
	° ′	*Feet*
Station No. 40	354 40	360.4
Station No. 42	241 06	362.1

Station No. 42, north side of road, 80 feet west of west end of Tenaya bridge, 18 feet west of 8-foot fir tree, in large boulder; bronze tablet stamped "3,992." Elevation, 3,992.35 feet.

[Latitude 37° 44′ 31.72″; longitude 119° 33′ 27.49″]

To station—	Azimuth	Distance
	° ′	*Feet*
Station No. 41	61 06	362.1
Station No. 43	238 54	199.0

Station No. 43, east side of road, 60 feet north of Tenaya bridge, 119.1 feet north of gage staff at Tenaya gaging station of the U. S. Geological Survey, in wall at edge of road; painted point on rock. Elevation, 3,986.26 feet.

[Latitude 37° 44′ 32.74″; longitude 119° 33′ 25.37″]

To station—	Azimuth	Distance
	° ′	*Feet*
Station No. 42	58 54	199.0
Station No. 44	148 30	395.8

From Tenaya bridge northeast along highway to Mirror Lake (leveled twice)

Station No. 82, north side of Mirror Lake road, in root of 3-inch cedar tree; copper nail. Elevation, by plane table alidade, 4,005.1 feet.

[Latitude 37° 44′ 37.15″; longitude 119° 33′ 24.33″]

To station—	Azimuth	Distance
	° ′	*Feet*
Station No. 44	69 23	310.
Station No. 83	249 34	326.9

Station No. 83, north side of road, in root of 12-inch pine tree, 15 inches east of trunk; copper nail. Elevation, 3,996.54 feet. (By single spur line. Not checked.)

[Latitude 37° 44′ 38.28″; longitude 119° 33′ 20.51″]

To station—	Azimuth	Distance
	° ′	*Feet*
Station No. 82	69 34	326.9
Station No. 84	265 18	400.2

Station No. 84, south side of road, in root of 15-inch pine tree, 6 inches south of trunk, 8 inches below surface of ground; copper nail. Elevation, 4,009.14 feet.

[Latitude 37° 44′ 38.60″; longitude 119° 33′ 15.55″]

To station—	Azimuth	Distance
	° ′	*Feet*
Station No. 83	85 18	400.2
Station No. 85	247 55	357.4

Station No. 85, north side of road (new Mirror Lake road), on rock at edge of ditch, only small part of rock projecting above ground; painted point. Elevation, 4,006.64 feet.

[Latitude 37° 44′ 39.93″; longitude 119° 33′ 11.42″]

To station—	Azimuth	Distance
	° ′	*Feet*
Station No. 84	67 55	357.4
Station No. 86	263 20	373.9

Station No. 86, south side of road, 20 feet southeast of sharp bend to north; painted point on top of large flat rock. Elevation, 4,016.40 feet.

[Latitude 37° 44′ 40.36″; longitude 119° 33′ 06.80″]

To station—	Azimuth	Distance
	° ′	*Feet*
Station No. 85	83 20	373.9
Station No. 87	190 15	131.2

Station No. 87, west side of road, 19.5 feet south of overhanging 14-inch oak tree; painted point on rock. Elevation, 4,026.96 feet.

[Latitude 37° 44′ 41.64″; longitude 119° 33′ 06.51″]

To station—	Azimuth	Distance
	° ′	*Feet*
Station No. 86	10 15	131.2
Station No. 88	239 00	351.5

Station No. 88, east side of road, 19 feet west of 2-foot oak tree; painted point. Elevation, 4,046.42 feet.

[Latitude 37° 44′ 43.43″; longitude 119° 33′ 02.76″]

To station—	Azimuth	Distance
	° ′	*Feet*
Station No. 87	59 00	351.5
Station No. 89	223 24	269.0

Station No. 89, east side of road, 30 feet north of 40-foot boulder; painted point on rock. Elevation, 4,064.18 feet.

[Latitude 37° 44′ 45.36″; longitude 119° 33′ 00.46″]

To station—	Azimuth	Distance
	° ′	*Feet*
Station No. 88	43 24	269.0
Station No. 90	197 16	250.5

Station No. 90, east side of road, probably moved in course of road construction; painted point on rock. Elevation, 4,084.07 feet.

[Latitude 37° 44′ 47.72″; longitude 119° 32′ 59.53″]

To station—	Azimuth	Distance
	° ′	*Feet*
Station No. 89	17 16	250.5
Station No. 91	154 37	342.3

Station No. 91, west side of road, in root of 3-foot pine tree; copper nail. Elevation, 4,081.81 feet.

[Latitude 37° 44′ 50.78″; longitude 119° 33′ 01.36″]

To station—	Azimuth	Distance
	° ′	*Feet*
Station No. 90	334 37	342.3
Station No. 92	205 55	399.1

Station No. 92, 50 feet east of road, 100 feet north of parking space at Mirror Lake, on top of small boulder; painted point. Elevation, 4,082.72 feet.

[Latitude 37° 44′ 54.33″; longitude 119° 32′ 59.19″]

To station—	Azimuth	Distance
	° ′	*Feet*
Station No. 91	25 55	399.1
Station No. 93	273 40	124.2

Station No. 93, Mirror Lake, 150 feet west of, 135 feet north of northeast corner of ice house, 30 feet south of trail, 35 feet southwest of 2-foot pine tree in direct line with Tenaya Canyon, in triangular summit of small boulder, 15 inches above ground; bronze tablet stamped "4,094." Elevation, 4,093.717 feet.

[Latitude 37° 44′ 54.25″; longitude 119° 32′ 57.64″]

To station—	Azimuth	Distance
	° ′	*Feet*
Station No. 92	93 40	124.2
Glacier Point triangulation station	47 11	

From Tenaya Bridge west along highways to Valley triangulation station

Station No. 44, Tenaya Bridge, 400 feet north of, where road to Mirror Lake leaves main road, south side of Mirror Lake road, 32.4 feet northeast of 10-inch cedar tree, at road corner; 1-inch pipe flush with ground. Elevation, 4,001.18 feet.

[Latitude 37° 44′ 36.07″; longitude 119° 33′ 27.94″]

To station—	Azimuth	Distance
	° ′	*Feet*
Station No. 43	328 30	395.8
Station No. 82	249 23	310.2
Station No. 45	91 20	665.2

Station No. 45, south side of road, at east end of automobile camp 17 (?), 2.5 feet south of 3-foot cedar tree; 1-inch pipe driven in ground. Elevation, 3,991.82 feet.

[Latitude 37° 44′ 36.22″; longitude 119° 33′ 36.22″]

To station—	Azimuth	Distance
	° ′	*Feet*
Station No. 44	271 20	665.2
Station No. 46	119 47	458.9

Station No. 46, south side of road, in root of 8-inch cedar tree; copper nail. Elevation, 3,989.33 feet.

[Latitude 37° 44′ 38.48″; longitude 119° 33′ 41.18″]

To station—	Azimuth	Distance
	° ′	*Feet*
Station No. 45	299 47	458.9
Station No. 47	141 53	637.5

Station No. 47, north side of road, 15.5 feet northeast of 1-foot oak tree; painted point on large rock. Elevation, 3,993.74 feet.

[Latitude 37° 44′ 43.43″; longitude 119° 33′ 46.08″]

To station—	Azimuth	Distance
	° ′	*Feet*
Station No. 46	321 53	637.5
Station No. 48	83 05	330.9

Station No. 48, south side of road, in root of 3-foot oak tree; copper nail. Elevation, 3,987.40 feet.

[Latitude 37° 44′ 43.04″; longitude 119° 33′ 50.17″]

To station—	Azimuth	Distance
	° ′	*Feet*
Station No. 47	263 05	330.9
Station No. 49	103 25	349.7

Station No. 49, north side of road, in root of 10-inch pine tree; copper nail. Elevation, 3,985.32 feet.

[Latitude 37° 44′ 43.84″; longitude 119° 33′ 54.41″]

To station—	Azimuth	Distance
	° ′	*Feet*
Station No. 48	283 25	349.7
Station No. 50	74 12	489.9

Station No. 50, south side of road, 80 feet west of second-class road south into meadow, on small projection from large rock nearly flush with ground; painted point. Elevation, 3,980.72 feet.

[Latitude 37° 44′ 42.52″; longitude 119° 34′ 00.28″]

To station—	Azimuth	Distance
	° ′	*Feet*
Station No. 49	254 12	489.9
Station No. 51	92 02	299.5

Station No. 51, north side of road, 17 feet west of 10-inch cedar tree; painted point on rock nearly at ground level. Elevation, 3,979.24 feet.

[Latitude 37° 44′ 42.62″; longitude 119° 34′ 04.01″]

To station—	Azimuth	Distance
	° ′	*Feet*
Station No. 50	272 02	299.5
Station No. 52	73 58	315.2

Station No. 52, south side of road, 25 feet from road at sharp bend to north, in root of 3-foot pine tree; copper nail. Elevation, 3.974.93 feet.

[Latitude 37° 44′ 41.76″; longitude 119° 34′ 07.78″]

To station—	Azimuth	Distance
	° ′	*Feet*
Station No. 51	253 58	315.2
Station No. 53	137 33	351.6

Station No. 53, south side of road, in root of 10-inch dead pine tree, 10 inches below general level of ground; nail. Elevation, 3,976.70 feet.

[Latitude 37° 44′ 44.33″; longitude 119° 34′ 10.74″]

To station—	Azimuth	Distance
	° ′	*Feet*
Station No. 52	317 33	351.6
Station No. 54	110 42	769.4

Station No. 54, south side of road, near east end of Yosemite National Park Co.'s corrals at Kinneyville, 13 feet south of road, in root of 2-foot pine tree, 10 inches below surface of ground; copper nail. Elevation, 3,975.23 feet.

[Latitude 37° 44′ 47.01″; longitude 119° 34′ 19.70″]

To station—	Azimuth	Distance
	° ′	*Feet*
Station No. 53	290 42	769.4
Station No. 55	141 47	517.8

Station No 55, north side of road, 45 feet from road, opposite road from Kinneyville to Camp Curry, in large flat-topped rock, nearly level with surface of ground; bronze tablet stamped "3,977" (?). Elevation, 3,976.963 feet.

[Latitude 37° 44′ 51.04″; longitude 119° 34′ 23.69″]

To station—	Azimuth	Distance
	° ′	*Feet*
Station No. 54	321 47	517.8
Station No. 76	359 11	837.1
Station No. 56	97 12	411.4

Station No. 56, south side of road, in root of 16-inch cedar tree, 8 inches below ground; copper nail. Elevation, 3,971.83 feet.

[Latitude 37° 44′ 51.55″; longitude 119° 34′ 28.77″]

To station—	Azimuth	Distance
	° ′	*Feet*
Station No. 55	277 12	411.4
Station No. 57	106 16	511.7

Station No. 57, north side of road, in root of 3-foot oak tree; copper nail. Elevation, 3,979.14 feet.

[Latitude 37° 44′ 52.96″; longitude 119° 34′ 34.88″]

To station—	Azimuth	Distance
	° ′	*Feet*
Station No. 56	286 16	511.7
Station No. 58	97 18	449.3

Station No. 58, south side of road, 13 feet north of 14-inch oak tree, on small sharp-topped boulder; painted point. Elevation, 3,980.50 feet.

[Latitude 37° 44′ 53.53″; longitude 119° 34′ 40.44″]

To station—	Azimuth	Distance
	° ′	*Feet*
Station No. 57	277 18	449.3
Station No. 59	123 28	425.3

Station No. 59, north side of road, on rock, in north end of culvert; painted point. Elevation, 3,979.86 feet.

[Latitude 37° 44′ 55.85″; longitude 119° 34′ 44.85″]

To station—	Azimuth	Distance
	° ′	*Feet*
Station No. 58	303 28	425.3
Station No. 60	91 27	491.1

Station No. 60, north side of road, in root of large stump, root on surface of ground, 3 feet northeast of main part of stump; copper nail. Elevation, 3,987.76 feet.

[Latitude 37° 44′ 55.97″; longitude 119° 34′ 50.96″]

To station—	Azimuth	Distance
	° ′	*Feet*
Station No. 59	271 27	491.1
Station No. 61	50 06	614.3

Station No. 61, south side of road, 49.5 feet west of main bridge over Indian Creek; painted point on rock. Elevation, 3,980.86 feet.

[Latitude 37° 44′ 52.07″; longitude 119° 34′ 56.83″]

To station—	Azimuth	Distance
	° ′	*Feet*
Station No. 60	230 06	614.3
Station No. 62	101 46	479.9

Station No. 62, south side of road, 21 feet east of culvert 424, on rock in retaining wall along roadway; painted point. Elevation, 3,980.21 feet.

[Latitude 37° 44′ 53.04″; longitude 119° 35′ 02.68″]

To station—	Azimuth	Distance
	° ′	*Feet*
Station No. 61	281 46	479.9
Station No. 63	86 17	411.6

Station No. 63, south side of road, opposite road to Government barns, in root of 3-foot oak tree, on south side of tree; spike. Elevation, 3,985.02 feet.

[Latitude 37° 44′ 52.77″; longitude 119° 35′ 07.80″]

To station—	Azimuth	Distance
	° ′	*Feet*
Station No. 62	266 17	411.6
Station No. 64	95 25	660.9

Station No. 64, north side of road, in root of 1-foot oak tree, 14 inches south of trunk; copper nail. Elevation, 3,980.74 feet.

[Latitude 37° 44′ 53.39″; longitude 119° 35′ 15.99″]

To station—	Azimuth	Distance
	° ′	*Feet*
Station No. 63	275 25	660.9
Station No. 65	58 33	567.7

Station No. 65, south side of road, 55 feet northwest of corner of E. P. Leavitt's house, in root of 3.5-foot oak tree; copper nail. Elevation, 3,968.91 feet.

[Latitude 37° 44′ 50.46″; longitude 119° 35′ 22.02″]

To station—	Azimuth	Distance
	° ′	*Feet*
Station No. 64	238 33	567.7
Station No. 66	39 56	388.5

Station No. 66, in triangle at junction of road north from Yosemite village with road along north side of valley, in root of 4-foot oak tree, on south side of tree; copper nail. Elevation, 3,963.47 feet.

[Latitude 37° 44′ 47.51″; longitude 119° 35′ 25.13″]

To station—	Azimuth	Distance
	° ′	*Feet*
Station No. 65	219 56	388.5
Station No. 67	345 52	643.0

Station No. 67, on west side of road, 50 feet southeast of elm tree, 71 feet north of 4-foot cottonwood tree with three trunks; painted rock in retaining wall along roadway. Elevation, 3,958.53 feet.

[Latitude 37° 44′ 41.35″; longitude 119° 35′ 23.17″]

To station—	Azimuth	Distance
	°	*Feet*
Station No. 66	165 52	643.0
Valley triangulation station	309 14	246.1

Primary traverse by A. T. Fowler in 1918

From Valley triangulation station east to station No. 55 P. B. M., at Kinneyville, thence south to station 17 at Camp Curry (primary transit traverse points only)

Station No. 69, north side of Kinneyville road, southeast of fence corner, in root of 3-foot pine tree, 3 feet north of trunk of tree, 3 inches below surface of ground; copper nail. Elevation by plane table, 3,958.6 feet.

[Latitude 37° 44′ 42.69″; longitude 119° 35′ 13.84″]

To station—	Azimuth	Distance
	° ′	*Feet*
Valley triangulation station	62 30	630.0
Station No. 70	269 03	778.8

Station No. 70, south side of road, in root of 2-foot cottonwood tree; copper nail. Elevation by plane table, 3,961.5 feet.

[Latitude 37° 44′ 42.82″; longitude 119° 35′ 04.14″]

To station—	Azimuth	Distance
	° ′	*Feet*
Station No. 69	89 03	778.8
Station No. 71	261 36	1,003.8

Station No. 71, south side of road, at edge of clearing, in root of cottonwood tree with three trunks; copper nail. Elevation, 3,963.9 feet.

[Longitude 37° 44′ 44.27″; longitude 119° 34′ 51.78″]

To station—	Azimuth	Distance
	° ′	*Feet*
Station No. 70	81 36	1,003.8
Station No. 72	281 13	693.7

Station No. 72, north side of road, 10 feet west of north end of culvert 419; painted point on top of small rock. Elevation by plane table, 3,962.8 feet.

[Latitude 37° 44′ 42.93″; longitude 119° 34′ 43.30″]

To station—	Azimuth	Distance
	° ′	*Feet*
Station No. 71	101 13	693.7
Station No. 73	292 29	554.6

Station No. 73, south side of road, in edge of woods, in stump of 4-inch pine tree; copper nail. Elevation by plane table, 3,964.3 feet.

[Latitude 37° 44′ 40.84″; longitude 119° 34′ 36.92″]

To station—	Azimuth	Distance
	° ′	*Feet*
Station No. 72	72 29	554.6
Station No. 74	262 52	298.9

Station No. 74, south side of road, in root of three-pronged oak tree; copper nail. Elevation by plane table, 3,966.3 feet.

[Latitude 37° 44′ 41.21″; longitude 119° 34′ 33.23″]

To station—	Azimuth	Distance
	° ′	*Feet*
Station No. 73	82 52	298.9
Station No. 75	265 01	499.9

Station No. 75, south side of road, 280 feet west of road corner, in root of 3-foot pine tree; copper nail. Elevation by plane table, 3,969.9 feet.

[Latitude 37° 44′ 42.40″; longitude 119° 34′ 27.19″]

To station—	Azimuth	Distance
	° ′	*Feet*
Station No. 74	76 01	499.9
Station No. 76	262 58	295.0

Station No. 76, east side of road, in southeast angle of road corner in south end of Kinneyville, 12 feet north of electric power pole, 20.5 feet northwest of northwest corner of porch; 1-inch gas pipe, nearly flush with surface of ground. Elevation by plane table, 3,970.2 feet.

[Latitude 37° 44′ 42.76″; longitude 119° 34′ 23.54″]

To station—	Azimuth	Distance
	° ′	*Feet*
Station No. 75	82 58	295.0
Station No. 55	179 11	837.1
Station No. 78	2 29	1,284.9

From P. B. M. at station No. 55, at road corner north of Kinneyville, south across Stoneman bridge to station No. 17 near entrance to Camp Curry. (No levels. Transit traverse only. Elevations by plane table traverse.)

Station No. 78, west side of road, in rock wall at west end of culvert 421; painted point on rock. Elevation, 3,966.3 feet.

[Latitude 37° 44′ 30.06″; longitude 119° 34′ 24.24″]

To station—	Azimuth	Distance
	° ′	*Feet*
Station No. 76	182 29	1,284.9
Station No. 79	3 35	216.3

Station No. 79, west side of road, 31.5 feet southwest of sprinkler station, near north end of Stoneman bridge, in root of 2-inch pine tree, 8 inches below surface of ground; copper nail. Elevation, 3,965.1 feet.

[Latitude 37° 44′ 27.92″; longitude 119° 34′ 24.41″]

To station—	Azimuth	Distance
	° ′	*Feet*
Station No. 78	183 35	216.3
Station No. 79A	333 17	80.9

Station No. 79A, west side of road, in root of pine tree; nail. Elevation, 3,967.1 feet.

[Latitude 37° 44′ 27.20″; longitude 119° 34′ 23.96″]

To station—	Azimuth	Distance
	° ′	*Feet*
Station No. 79	153 17	80.9
Station No. 80	322 01	881.9

Station No. 80, west side of road, 120 feet south of building at gasoline station, on north edge of thicket, in stump of locust tree; copper nail. Elevation, 3,981.9 feet.

[Latitude 37° 44′ 20.33″; longitude 119° 34′ 17.20″]

To station—	Azimuth	Distance
	° ′	*Feet*
Station No. 79A	142 01	881.9
Station No. 17	340 47	334.0

Station No. 18E, 12 feet south of road, 17 feet northwest of 4-foot cedar tree; 1-inch iron pipe driven in ground. Elevation, 3,987 feet.

[Latitude 37° 44′ 23.23″; longitude 119° 33′ 38.11″]

To station—	Azimuth	Distance
	° ′	*Feet*
Station No. 39	269 21	346.6
Station No. 18D	108 30	161.3

Station 18D, north side of road, 24.6 feet east of 4-foot cedar tree; painted point on sharp top of rock. Elevation, 3,985.7 feet.

[Latitude 37° 44′ 23.73″; longitude 119° 33′ 40.03″]

To station—	Azimuth	Distance
	° ′	*Feet*
Station No. 18E	288 30	161.3
Station No. 18C	95 57	804.2

Station No. 18C, north side of road, 70.2 feet northeast of east end of Clarks bridge; painted point on top of rock. Elevation, 3,981.8 feet.

[Latitude 37° 44′ 24.55″; longitude 119° 33′ 49.99″]

To station—	Azimuth	Distance
	° ′	*Feet*
Station No. 18D	275 57	804.2
Station No. 18B	30 14	172.7

Station No. 18B, south side of road, 42.8 feet southwest of west end of Clarks bridge; painted point on small rock. Elevation, 3,979.9 feet.

[Latitude 37° 44′ 23.07″; longitude 119° 33′ 51.08″]

To station—	Azimuth	Distance
	° ′	*Feet*
Station No. 18C	210 14	172.7
Station No. 18A	60 41	1,005.1

Station No. 18A, north side of road, in root of pine tree; copper nail. Elevation, 3,978.2 feet.

[Latitude 37° 44′ 18.20″; longitude 119° 34′ 02.00″]

To station—	Azimuth	Distance
	° ′	*Feet*
Station No. 18B	240 41	1,005.1
Station No. 18	51 48	178.6

Primary leveling by L. S. Leopold in 1919. Primary traverse by A. T. Fowler in 1919

From Valley triangulation station northwest along highways 1 mile

Station No. 101, supervisor's house, 110 feet west of, 2 feet south of south edge of road, in northeast root of 4-foot oak tree; top one of three nails, painted "101" on tree. Elevation, 3,963.34 feet.

[Latitude 37° 44′ 46.37″; longitude 119° 35′ 32.59″]

To station—	Azimuth	Distance
	° ′	*Feet*
Valley triangulation station	305 01	1,156.6
Station No. 102	66 00	560.4

Station No. 102, bridge over Yosemite Creek, 85 feet east of, 20 feet south of south edge of road, 12 feet southeast of sprinkler station; painted point on rock in 1-foot wall, painted "102." Elevation, 3,960.07 feet.

[Latitude 37° 44′ 44.12″; longitude 119° 35′ 38.96″]

To station—	Azimuth	Distance
	° ′	*Feet*
Station No. 101	246 00	560.4
Station No. 103	109 15	229.9

Station No. 103, bridge over Yosemite Creek, 100 feet west of, at south end of pipe culvert, on 1-foot rock; painted point on highest part, painted "103" on rock. Elevation, 3,961.66 feet.

[Latitude 37° 44′ 44.87″; longitude 119° 35′ 41.66″]

To station—	Azimuth	Distance
	° ′	*Feet*
Station No. 102	289 15	229.9
Station No. 104	79 16	400.6

Station No. 104, Yosemite Hospital, 10 feet west of line of west wall of, 65 feet southeast of southeast corner of triangle of roads to hospital, 5 feet south of south edge of road, 5 feet north of path; paint mark on top of small rock, 3 inches above ground, painted "104" on rock. Elevation, 3,972.16 feet.

[Latitude 37° 44′ 44.13″; longitude 119° 35′ 46.56″]

To station—	Azimuth	Distance
	° ′	*Feet*
Station No. 103	259 16	400.6
Station No. 105	64 15	529.4

Station No. 105, main building of Yosemite Camp, 110 feet west of west end of steps of, in south root of cedar tree, in road; copper nail and washer, painted "105" on tree. Elevation, 3,977.75 feet.

[Latitude 37° 44′ 41.86″; longitude 119° 35′ 52.50″]

To station—	Azimuth	Distance
	° ′	*Feet*
Station No. 104	244 15	529.4
Station No. 105	57 39	538.6

Station No. 106, road south to Yosemite National Park Co.'s garage, 375 feet west of, 25 feet west of house No. 63, in south root of 4-foot pine tree, on south side of road; copper nail and washer, painted "106" on tree. Elevation, 3,982.32 feet.

[Latitude 37° 44′ 39.01″; longitude 119° 35′ 58.17″]

To station—	Azimuth	Distance
	° ′	*Feet*
Station No. 105	237 39	538.6
Station No. 107	30 26	353.2

Station No. 107, house No. 60, north end of culvert in front of, on northeast corner of rock; painted point, painted "107" on rock. Elevation, 3,978.59 feet.

[Latitude 37° 44′ 36.00″; longitude 119° 36′ 00.40″]

To station—	Azimuth	Distance
	° ′	*Feet*
Station No. 106	210 26	353.2
Station No. 108	8 18	313.1

Station No. 108, at fork of road southeast to Yosemite National Park Co.'s garage, in front of house No. 58, on south edge of road, in root on north side of 2½-foot oak tree, 1 foot below ground; copper nail and washer, painted "108" on tree. Elevation, 3,970.26 feet.

[Latitude 37° 44′ 32.94″; longitude 119° 36′ 00.96″]

To station—	Azimuth	Distance
	° ′	*Feet*
Station No. 107	188 18	313.1
Station No. 109	46 46	617.5

Yosemite Valley, at foot of trail to Yosemite Falls, 100 feet west of road, 30 feet south of trail, face of large granite boulder; aluminum tablet stamped "3,989 B." Elevation, 3,989.013 feet.

From point 1 mile northwest of Valley triangulation station west along highways to Pohono bridge

Station No. 109, sign "Yosemite Falls 3½ miles," 420 feet west of, in group of large pine trees, on south edge of trail, in northwest root of 6-inch cedar tree; copper nail and washer, painted "109" on tree. Elevation, 3,967.12 feet.

[Latitude 37° 44′ 28.76″; longitude 119° 36′ 06.56″]

To station—	Azimuth	Distance
	° ′	*Feet*
Station No. 108	226 46	617.5
Station No. 110	56 26	728.2

Station No. 110, on south side of road, 160 feet east of burned cedar stump, opposite 5-foot cedar tree 20 feet north of road, in north root of 2-foot oak tree; copper nail and washer, painted "110" on tree. Elevation, 3,971.82 feet.

[Latitude 37° 44′ 24.78″; longitude 119° 36′ 14.11″]

To station—	Azimuth	Distance
	° ′	*Feet*
Station No. 109	236 26	728.2
Station No. 111	64 41	370.4

Station No. 111, electric pole on north edge of road, 35 feet west of, 15 feet north of north edge of road, in top of stump of 6-inch cedar 6 inches high; copper nail and washer, painted "111." Elevation, 3,968.06 feet.

[Latitude 37° 44′ 23.21″; longitude 119° 36′ 18.28″]

To station—	Azimuth	Distance
	° ′	*Feet*
Station No. 110	244 41	370.4
Station No. 112	58 07	260.7

Station No. 112, in bend of road to north, 80 feet northeast of 6-foot pine tree, in south root of 20-inch oak tree, on north edge of road, 5 inches below ground level; copper nail and washer, painted "112" on tree. Elevation, 3,959.93 feet.

[Latitude 37° 44′ 21.85″; longitude 119° 36′ 21.04″]

To station—	Azimuth	Distance
	° ′	*Feet*
Station No. 111	238 07	260.7
Station No. 113	75 54	281.7

Station No. 113, in bend of road to south, 40 feet north of 100-foot boulder, on southeast corner of 3 by 4 inch rock, on north edge of road; painted point 6 inches above ground, painted "113" on rock. Elevation, 3,961.32 feet.

[Latitude 37° 44′ 21.17″; longitude 119° 36′ 24.44″]

To station—	Azimuth	Distance
	° ′	*Feet*
Station No. 112	255 54	281.7
Station No. 114	21 29	514.9

Station No. 114, on east side of second-class road south to meadow, opposite small gravel pit, in north root of 20-inch cedar tree, 8 feet south of road, 6 inches below ground level; copper nail and washer, painted "114" on tree. Elevation, 3,961.22 feet.

[Latitude 37° 44′ 16.43″; longitude 119° 36′ 26.79″]

To station—	Azimuth	Distance
	° ′	*Feet*
Station No. 113	201 29	514.9
Station No. 115	38 44	163.7

Station No. 115, 15-foot boulder extending into south edge of road, 40 feet northeast of, on north edge of road, on southeast corner of 5 by 5-foot rock level with road; painted point, painted "115" on rock. Elevation, 3,960.92 feet.

[Latitude 37° 44′ 15.17″; longitude 119° 36′ 28.06″]

To station—	Azimuth	Distance
	° ′	*Feet*
Station No. 114	218 44	163.7
Station No. 116	21 03	358.3

Station No. 116, summit in road over rocks, 40 feet east of, east corner of long narrow stone, in south wall of road, 2 inches above road; point on rock in painted square, painted "116" on rock southeast. Elevation, 3,966.01 feet.

[Latitude 37° 44′ 11.86″; longitude 119° 36′ 29.66″]

To station—	Azimuth	Distance
	° ′	*Feet*
Station No. 115	201 03	358.3
Station No. 117	30 24	206.5

Station No. 117, in bend of road to north, at north edge of road, in root of fir tree, 7 feet south of tree; copper nail and washer, painted "117". Elevation, 3,960.71 feet.

[Latitude 37° 44′ 10.10″; longitude 119° 36′ 30.96″]

To station—	Azimuth	Distance
	° ′	*Feet*
Station No. 116	210 24	206.5
Station No. 118	37 36	305.4

Station No. 118, at north edge of road, on rock; painted point, 20 inches above ground, painted "118" on rock. Elevation, 3,957.02 feet.

[Latitude 37° 44′ 07.71″; longitude 119° 36′ 35.74″]

To station—	Azimuth	Distance
	° ′	*Feet*
Station No. 117	217 36	305.4
Station No. 119	44 18	282.5

Station No. 119, on north edge of road, 200 feet east of 6-foot pine tree, on point of small rock, 20 inches above road; painted point, painted "119" on rock. Elevation, 3,958.51 feet.

[Latitude 37° 44′ 05.71″; longitude 119° 36′ 35.74″]

To station—	Azimuth	Distance
	° ′	*Feet*
Station No. 118	224 18	282.5
Station No. 120	29 43	513.6

Station No. 120, on north edge of road, 290 feet west of 6-foot pine tree, in long bend in road to south, 8 feet north of north edge of road, in root 3 feet southeast of 18-inch cedar tree, 1 foot below ground level; copper nail and washer, painted "120." Elevation, 3,957.05 feet.

[Latitude 37° 44′ 01.30″; longitude 119° 36′ 38.91″]

To station—	Azimuth	Distance
	° ′	*Feet*
Station No. 119	209 43	513.6
Station No. 121	346 41	440.4

Station No. 121, large culvert, 135 feet west of, 10 feet south of road, in top of 4-inch pine stump 8 inches high; 10-penny nail, painted "121." Elevation, 3,966.15 feet.

[Latitude 37° 43′ 57.06″; longitude 119° 36′ 37.65″]

To station—	Azimuth	Distance
	° ′	*Feet*
Station No. 120	166 41	440.4
Station No. 122	11 28	668.7

Station No. 122, west end of long tangent at bend to north, 5 feet east of 2½-foot oak tree, on north edge of road, on top of 1 by 1 foot stone 6 inches above ground; paint mark, painted "122." Elevation, 3,966.89 feet.

[Latitude 37° 43′ 50.58″; longitude 119° 36′ 39.30″]

To station—	Azimuth	Distance
	° ′	*Feet*
Station No. 121	191 28	668.7
Station No. 123	23 25	453.5

Station No. 123, halfway on long tangent, 2 feet north of north edge of road, top of 7-inch pine stump 10 inches high; 10-penny nail, painted "123." Elevation, 3,964.02 feet.

[Latitude 37° 43′ 46.47″; longitude 119° 36′ 41.54″]

To station—	Azimuth	Distance
	° ′	*Feet*
Station No. 122	203 25	453.5
Station No. 124	22 28	599.7

Station No. 124, 6 feet south of road at long bend to north, 3-foot and 5-foot cedar trees, in north root of larger one, level with ground; copper nail and washer, painted "124." Elevation, 3,958.25 feet.

[Latitude 37° 43′ 40.99″; longitude 119° 36′ 44.39″]

To station—	Azimuth	Distance
	° ′	*Feet*
Station No. 123	202 28	599.7
Station No. 125	54 54	318.4

Station No. 125, second-class road south on long bend to north, at southwest corner of junction, in root on north side of 4-foot pine tree, 8 inches below ground level; copper nail and washer, painted "125." Elevation, 3,954.96 feet.

[Latitude 37° 43′ 39.18″; longitude 119° 36′ 47.63″]

To station—	Azimuth	Distance
	° ′	*Feet*
Station No. 124	234 54	318.4
Station No. 126	74 58	578.7

Station No. 126, on long bend to north, 5 feet south of south edge of road, 4-inch cedar stump 8 inches high, in top of; 10-penny nail, painted "126." Elevation, 3,957.67 feet.

[Latitude 37° 43′ 37.69″; longitude 119° 36′ 54.59″]

To station—	Azimuth	Distance
	° ′	*Feet*
Station No. 125	254 58	578.7
Station No. 127	88 33	262.8

Station No. 127, at east end of long tangent, 3 feet south of south edge of road, in clearing, 6 feet northeast of lone 4-inch pine tree; bottle, top flush with ground, painted "127" on pine tree. Elevation, 3,957.73 feet.

[Latitude 37° 43′ 37.62″; longitude 119° 36′ 57.86″]

To station—	Azimuth	Distance
	° ′	*Feet*
Station No. 126	268 33	262.8
Station No. 128	100 40	785.9

Station No. 128, opposite road south to bear pits, 3 feet north of road, in seat in twisted trunk of pine tree, south side 2 feet above ground; copper nail and washer, painted "128." Elevation, 3,971.90 feet.

[Latitude 37° 43′ 39.06″; longitude 119° 37′ 07.47″]

To station—	Azimuth	Distance
	° ′	*Feet*
Station No. 127	280 40	785.9
Station No. 129	93 00	703.8

Station No. 129, north edge of road, 4 feet north of, in root on south side of 6-foot pine tree, 1 foot below ground level; copper nail and washer, painted "129" on tree. Elevation, 3,964.08 feet.

[Latitude 37° 43′ 39.42″; longitude 119° 37′ 16.22″]

To station—	Azimuth	Distance
	° ′	*Feet*
Station No. 128	273 00	703.8
Station No. 130	82 13	389.6

Station No. 130, diagonal culvert, 145 feet west of south end of, 3 feet south of south edge of road, 8½ feet north of wire fence, 1-inch hub flush with ground; small nail in top of, not marked. Elevation, 3,958.70 feet.

[Latitude 37° 43′ 38.90″; longitude 119° 37′ 21.03″]

To station—	Azimuth	Distance
	° ′	*Feet*
Station No. 129	262 13	389.6
Station No. 131	121 42	287.5

Station No. 131, second-class road northeast, at northwest corner of junction, 2 feet north of road, in root 1 foot southwest of 1.25-foot pine tree; 10-penny nail, painted "131." Elevation, 3,953.72 feet.

[Latitude 37° 43′ 40.40″; longitude 119° 37′ 24.08″]

To station—	Azimuth	Distance
	° ′	*Feet*
Station No. 130	301 42	287.5
Station No. 132	79 48	314.9

Station No. 132, 7.5 feet northwest of 2-foot cedar tree used for wire-fence post, in top of 3-inch pine stump 5 inches high; 10-penny nail, painted "132." Elevation, 3,949.79 feet.

[Latitude 37° 43′ 39.85″; longitude 119° 37′ 27.94″]

To station—	Azimuth	Distance
	° ′	*Feet*
Station No. 131	259 48	314.9
Station No. 133	72 45	345.9

Station No. 133, 4 feet north of road, in top of 7-inch pine stump 1 foot high; 10-penny nail, painted "133." Elevation, 3,953.04 feet.

[Latitude 37° 43′ 38.39″; longitude 119° 37′ 32.05″]

To station—	Azimuth	Distance
	° ′	*Feet*
Station No. 132	252 45	345.9
Station No. 134	78 47	231.3

Station No. 134, culvert 411, 45 feet east of, in root 1 foot northeast of 1.5-foot cedar tree, 6 inches below ground level; copper nail and washer, painted "134." Elevation, 3,950.94 feet.

[Latitude 37° 43′ 38.39″; longitude 119° 37′ 34.87″]

To station—	Azimuth	Distance
	° ′	*Feet*
Station No. 133	258 47	231.3
Station No. 135	93 03	443.3

Station No. 135, second-class road west-northwest, 425 feet east of, on north edge of road, in root on south side of 4-foot cedar tree, flush with ground; copper nail and washer, painted "135." Elevation, 3,959.59 feet.

[Latitude 37° 43′ 38.62″; longitude 119° 37′ 40.38″]

To station—	Azimuth	Distance
	° ′	*Feet*
Station No. 134	273 03	443.3
Station No. 136	92 03	422.2

Station No. 136, at second-class road fork west-northwest, 3 feet west of west end of culvert, on northwest corner of rock; paint mark, painted "136." Elevation, 3,954.35 feet.

[Latitude 37° 43′ 38.77″; longitude 119° 37′ 45.63″]

To station—	Azimuth	Distance
	° ′	*Feet*
Station No. 135	272 03	422.2
Station No. 137	59 44	229.8

Station No. 137, second-class road fork west-northwest, 230 feet west of, in bend to south, on north edge of road, at foot of 3-foot forked oak tree, on small rock, 1 foot above ground; chiseled point in painted square, painted "137." Elevation, 3,957.75 feet.

[Latitude 37° 43′ 37.62″; longitude 119° 37′ 48.10″]

To station—	Azimuth	Distance
	° ′	*Feet*
Station No. 136	239 44	229.8
Station No. 138	346 31	288.6

Station No. 138, Sprinkler station, 90 feet east of, in long bend to north, 4 feet south of south edge of road, in root of pine tree, 1 foot east of trunk, 16 inches below ground level; copper nail and washer, painted "138." Elevation, 3,948.22 feet.

[Latitude 37° 43′ 34.85″; longitude 119° 37′ 47.26″]

To station—	Azimuth	Distance
	° ′	*Feet*
Station No. 137	166 31	288.6
Station No. 139	34 09	412.4

Station No. 139, El Capitan Meadow, at east end of, 3 feet south of south edge of road, in root of 1-foot pine tree, 18 inches northeast of trunk, level with center of road; small nail, painted "139." Elevation, 3,848.86 feet.

[Latitude 37° 43′ 31.48″; longitude 119° 37′ 50.14″]

To station—	Azimuth	Distance
	° ′	*Feet*
Station No. 138	214 09	412.4
Station No. 140	56 20	401.0

Station No. 140, El Capitan Meadow, 400 feet west of east end of, on south edge of road, highest point of 2 by 3 foot rock, 1.5 feet above ground; chiseled point in painted mark, painted "140." Elevation, 3,950.62 feet.

[Latitude 37° 43′ 29.28″; longitude 119° 37′ 54.29″]

To station—	Azimuth	Distance
	° ′	*Feet*
Station No. 139	236 20	401.0
Station No. 141	72 50	323.7

Station No. 141, in El Capitan Meadow, at east end of 2,000-foot tangent in road, 8 feet south of south edge of road, top of 1-inch gas pipe, 1 inch above ground; painted "141" on loose stone. Elevation, 3,952.80 feet.

[Latitude 37° 43′ 28.33″; longitude 119° 37′ 58.14″]

To station—	Azimuth	Distance
	° ′	*Feet*
Station No. 140	252 50	323.7
Station No. 142	93 31	1,320.0

Station No. 142, culvert No. 409, 675 feet east of west end of 2,000-foot tangent in road along El Capitan Meadow, over center of north end of culvert, highest point in center of stone; chiseled point in painted mark, painted "142." Elevation, 3,955.80 feet.

[Latitude 37° 43′ 29.13″; longitude 119° 38′ 14.54″]

To station—	Azimuth	Distance
	° ′	*Feet*
Station No. 141	273 31	1,320.0
Station No. 143	90 07	855.2

Station No. 143, west of second-class road northeast, 150 feet west of west end of 2,000-foot tangent in road along El Capitan Meadow, 4 feet north of north edge of main road, 4.5 feet east of 2-foot pine tree, in root, 5 inches above ground; copper nail and washer, painted "143." Elevation, 3,962.24 feet.

[Latitude 37° 43′ 29.15″; longitude 119° 38′ 25.18″]

To station—	Azimuth	Distance
	° ′	*Feet*
Station No. 142	270 07	855.2
Station No. 144	78 43	814.8

Station No. 144, at road south to El Capitan Bridge, 50 feet east of signboard, 5 feet south of south edge of road, in root on north side of 18-inch pine tree, 7 inches below ground level; copper nail and washer, painted "144." Elevation, 3,968.61 feet.

[Latitude 37° 43′ 27.57″; longitude 119° 38′ 35.13″]

To station—	Azimuth	Distance
	° ′	*Feet*
Station No. 143	258 43	814.8
Station No. 145	82 10	266.3

Station No. 145, junction of Big Oak Flat road and main road along north side of valley, northeast of junction, 35 feet southwest of southwest corner of El Capitan checking station, on east edge of Big Oak Flat, in root on southwest side of 15-inch oak tree, flush with ground; copper nail and washer, painted "145" on tree. Elevation, 3,973.29 feet.

[Latitude 37° 43′ 27.21″; longitude 119° 38′ 38.41″]

To station—	Azimuth	Distance
	° ′	*Feet*
Station No. 144	262 10	266. 3
Station No. 146	60 07	426. 2

Station No. 146, El Capitan checking station, 425 feet west of, on south edge of road, in north root of 1-foot pine tree, 3 inches below ground level; small nail, painted "146" on tree. Elevation, 3,966.08 feet.

[Latitude 37° 43′ 25.11″; longitude 119° 38′ 43.01″]

To station—	Azimuth	Distance
	° ′	*Feet*
Station No. 145	240 07	426. 2
Station No. 147	65 56	552. 2

Station No. 147, El Capitan checking station, 980 feet west of, at east end of bend to north, 1 foot south of south edge of road, on north side of 5-inch stump 4 inches high; 1-inch gas pipe 1 inch above ground, painted on loose 1-foot rock "147." Elevation, 3,950.76 feet.

[Latitude 37° 43′ 22.88″; longitude 119° 38′ 49.29″]

To station—	Azimuth	Distance
	° ′	*Feet*
Station No. 146	245 56	552. 2
Station No. 148	85 18	261. 8

Station No. 148, opposite Bridal Veil Falls, at bend to south, 15 feet southwest of 6-foot cedar tree, 1 foot north of north edge of road, on rock in bank, 6 inches above road; chiseled point in painted square, painted "149." Elevation, 3,936.38 feet.

[Latitude 37° 43′ 22.67″; longitude 119° 38′ 52.54″]

To station—	Azimuth	Distance
	° ′	*Feet*
Station No. 147	265 18	261. 8
Station No. 149	60 35	651. 7

Station No. 149, Sprinkling Station, 65 feet west of, on 2 by 3 foot rock, in south wall of road, 1 foot south of south edge of road; chiseled point in painted square, painted "149." Elevation, 3,920.51 feet.

[Latitude 37° 43′ 19.51″; longitude, 119° 38′ 59.60″]

To station—	Azimuth	Distance
	° ′	*Feet*
Station No. 148	240 35	651. 7
Station No. 150	80 36	335. 9

Station No. 150, second-class road southwest, 140 feet east of, in north edge of road, in root on south side of 2.5-foot oak tree, 2 feet above road; copper nail and washer, painted "150." Elevation, 3,917.38 feet.

[Latitude 37° 43′ 18.97″; longitude 119° 39′ 03.73″]

To station—	Azimuth	Distance
	° ′	*Feet*
Station No. 149	260 36	335.9
Station No. 151	73 43	467.1

Station No. 151, second-class road southwest, 325 feet west of, at east end of bend to south, on root on south side of 18-inch cedar, on south side of road, 14 inches below ground level; 10-penny nail, painted "151." Elevation, 3,917.02 feet.

[Latitude 37° 43′ 17.67″; longitude 119° 39′ 09.31″]

To station—	Azimuth	Distance
	° ′	*Feet*
Station No. 150	253 43	467.1
Station No. 152	67 30	338.9

Station No. 152, in north edge of road, 3-foot oak, in root on south side of, 26 inches above road; copper nail and washer, painted "152" on tree. Elevation, 3,914.11 feet.

[Latitude 37° 43′ 16.40″; longitude 119° 39′ 13.21″]

To station—	Azimuth	Distance
	° ′	*Feet*
Station No. 151	247 30	338.9
Station No. 153	48 47	255.3

Station No. 153, at north edge of road, on bank, 3 feet above road, 18-inch leaning cedar tree, 4 feet south of, on root, 8 inches above road; small nail and paint mark, painted "153." Elevation, 3,911.71 feet.

[Latitude 37° 43′ 14.74″; longitude 119° 39′ 15.60″]

To station—	Azimuth	Distance
	° ′	*Feet*
Station No. 152	228 47	255.3
Station No. 154	34 26	195.5

Station No. 154, south of road, 4-foot oak tree with top off and 8-inch rock embedded in north side 10 feet above ground, 16 feet northeast of, on south edge of road, on 1 by 1 foot rock, in low wall, 6 inches above road; chiseled point in painted square, on highest point, painted "154." Elevation, 3,904.99 feet.

[Latitude 37° 43′ 13.15″; longitude 119° 39′ 16.98″]

To station—	Azimuth	Distance
	° ′	*Feet*
Station No. 153	214 26	195.5
Station No. 155	61 28	183.9

Station No. 155, 4 large pine trees on south side of road, by 4-foot wall opposite, 1 foot north of north edge of road, in root on south side of 2.5-foot oak tree, 5 inches above ground; small nail, painted "155." Elevation, 3,902.56 feet.

[Latitude 37° 43′ 12.28″; longitude 119° 39′ 18.99″]

To station—	Azimuth	Distance
	° ′	*Feet*
Station No. 154	241 28	183.9
Station No. 156	34 02	340.8

Station No. 156, on bend to north, 3 feet south of road, on top of small rock, 5 inches below road; chiseled point in painted square, painted on a 1 by 1 foot rock, "156." Elevation, 3,892.90 feet.

[Latitude 37° 43′ 09.49″; longitude 119° 39′ 21.36″]

To station—	Azimuth	Distance
	° ′	*Feet*
Station No. 155	214 02	340.8
Station No. 157	79 17	190.3

Station No. 157, near east end of 4-foot wall, on south side of road, 14 feet east of cottonwood tree with automobile warning sign, in bend to north, 1 inch above road; chiseled point in 1-inch chiseled square, square painted white, painted on rock west, "157." Elevation, 3,891.66 feet.

[Latitude 37° 43′ 09.14″; longitude 119° 39′ 23.69″]

To station—	Azimuth	Distance
	° ′	*Feet*
Station No 156	259 17	190.3
Station No. 158	110 59	624.0

Station No. 158, triplet cottonwood tree on north side of road, 300 feet west of, at bend south, 10 feet north of north edge of road, in root 1 foot southeast of 1-foot cedar, 3 feet southeast of 1-foot cottonwood tree; nail, 5 inches below ground, painted "158." Elevation, 3,889.96 feet.

[Latitude 37° 43′ 11.35″; longitude 119° 39′ 30.94″]

To station—	Azimuth	Distance
	° ′	*Feet*
Station No. 157	290 59	624.0
Station No. 159	66 21	464.8

Station No. 159, concrete watering trough on north side of road, 110 feet west of, 3 feet north of north edge of road, on small overhanging rock; chiseled point in chiseled square, in painted square, painted "159." Elevation, 3,889.62 feet.

[Latitude 37° 43′ 09.51″; longitude 119° 39′ 36.24″]

To station—	Azimuth	Distance
	° ′	*Feet*
Station No.158	246 21	464.8
Station No. 160	33 48	838.2

Station No. 160, concrete powder house north of road, 540 feet west of, in bend to north, 8 feet south of south edge of road; 1-inch gas pipe, 1-inch above ground, painted white, painted on 3-foot stake, "160." Elevation, 3,880.34 feet.

Latitude 37° 43′ 02.62″; longitude 119° 39′ 42.04″]

To station—	Azimuth	Distance
	° ′	*Feet*
Station No. 159	213 48	838.2
Station No. 161	79 10	826.3

Station No. 161, Pohono bridge, 310 feet east of, on northwest corner of 2 by 3 foot rock, on south edge of road, 16 inches above road; chiseled point in painted square, painted "161." Elevation, 3,877.38 feet.

[Latitude 37° 43′ 01.08″; longitude 119° 39′ 52.14″]

To station—	Azimuth	Distance
	° ′	*Feet*
Station No. 160	259 10	826.3
Station No. 162	112 22	334.3

Station No. 162, Pohono bridge, 105 feet north of, 1 foot north of road, on 3-foot rock, 18 inches above road; chiseled point in painted square, painted "162." Elevation, 3,879.53 feet.

[Latitude 37° 43′ 02.35″; longitude 119° 39′ 56.00″]

To station—	Azimuth	Distance
	° ′	*Feet*
Station No. 161	292 22	334.3
P. B. M.	49 49	55.7
Station No. 163	354 58	285.9

Yosemite Valley, north side of river, at west turn to bridge, near edge of road, 75 feet northwest of Pohono bridge, large boulder; aluminum tablet stamped "3,880 B" (Bull. 342, p. 116). Elevation, 3,879.767 feet.

[Latitude 37° 43′ 01.97″; longitude 119° 39′ 56.51″]

To station—	Azimuth	Distance
	° ′	*Feet*
Station No. 162	229 49	55.7

From Pohono bridge south and east along highways to Valley triangulation station

Station No. 163, Pohono bridge, 90 feet southeast of, 8 feet southeast of road, on top of rock, 2 feet above ground; chiseled point in painted square, painted "163." Elevation, 3,882.30 feet.

[Latitude 37° 42′ 59.53″; longitude 119° 39′ 55.69″]

To station—	Azimuth	Distance
	° ′	*Feet*
Station No. 162	174 58	285.9
Station No. 164	290 53	260.8

Station No. 164, on north side of road, 4-foot fir tree with automobile warning signal, 30 feet east of, 15 feet east of telegraph pole with automobile warning sign, 4 feet north of road, on highest point of 2 by 3 foot rock, 6 inches above ground; chiseled point in painted square, painted "164" on rock. Elevation, 3,881.59 feet.

[Latitude 37° 42′ 58.61″; longitude 119° 39′ 52.66″]

To station—	Azimuth	Distance
	° ′	*Feet*
Station No. 163	110 53	260.8
Station No. 165	346 37	252.4

Station No. 165, Fern Spring, 60 feet northwest of, 5 feet west of 2-foot spruce tree, on north edge of road, on small rock in wall, flush with road; chiseled point in painted square, painted on rock "165." Elevation, 3,886.54 feet.

[Latitude 37° 42′ 56.18″; longitude 119° 39′ 51.93″]

To station—	Azimuth	Distance
	° ′	*Feet*
Station No. 164	166 37	252.4
Station No. 166	323 16	325.0

Station No. 166, Fern Spring, 280 feet east of, 35 feet west of culvert No. 322, 5 feet south of south edge of road, opposite telegraph pole; highest point of 1 by 2 foot rock, 8 inches above ground; chiseled point in painted square, painted on rock, "166." Elevation, 3,898.04 feet.

[Latitude 37° 42′ 53.60″; longitude 119° 39′ 49.51″]

To station—	Azimuth	Distance
	° ′	*Feet*
Station No. 165	143 16	325.0
Station No. 167	260 14	437.6

Station No. 167, culvert 322, 400 feet east of, 95 feet west of 5-foot fir tree with sign "Speed limit 12 miles" on south side of road, southeast of telegraph pole, 2 feet south of south edge of road, on small rock, 6 inches above ground; chiseled point in painted square, painted on rock, "167." Elevation, 3,912.29 feet.

[Latitude 37° 42′ 54.34″; longitude 119° 39′ 44.14″]

To station—	Azimuth	Distance
	° ′	*Feet*
Station No. 166	80 14	437.6
Station No. 168	248 14	351.8

Station No. 168, Bridal Veil Meadow, 250 feet west of, 145 feet west of speed-limit sign on south side of road, 1 foot north of north edge of road, 2 feet east of telegraph pole; 1-inch gas pipe, 1 inch above ground, painted white, painted on pole, "168." Elevation, 3,912.76 feet.

[Latitude 37° 42′ 55.63″; longitude 119° 39′ 40.07″]

To station—	Azimuth	Distance
	° ′	*Feet*
Station No. 167	68 14	351.8
Station No. 169	267 19	307.0

Station No. 169, Bridal Veil Meadow, 50 feet west of west end of, 7 feet south of south edge of road, 3 feet northwest of 4-inch elm tree, in top of 5-inch stump 8 inches high; 10-penny nail, painted on elm, "169." Elevation, 3,910.20 feet.

[Latitude 37° 42′ 55.77″; longitude 119° 39′ 36.25″]

To station—	Azimuth	Distance
	° ′	*Feet*
Station No. 168	87 19	307.0
Station No. 170	235 06	939.8

Station No. 170, Bridal Veil Meadow, 175 feet east of gate at east end of, 15 feet north of north edge of road, in root 1 foot south of 1-foot oak tree, 12 inches below ground level; copper nail and washer, painted on tree, "170." Elevation, 3,906.73 feet.

[Latitude 37° 43′ 01.09″; longitude 119° 39′ 26.66″]

To station—	Azimuth	Distance
	° ′	*Feet*
Station No. 169	55 06	939.8
Station No. 171	266 36	433.5

Station No. 171, culvert 324, 250 feet east of, 100 feet east of second-class road northwest, on north edge of road, 1 foot southwest of telegraph pole; chiseled point in painted circle; painted on pole, "171." Elevation, 3,924.60 feet.

[Latitude 37° 43′ 01.34″; longitude 119° 39′ 21.27″]

To station—	Azimuth	Distance
	° ′	*Feet*
Station No. 170	86 36	433.5
Station No. 172	253 51	630.5

Station No. 172, stable No. 48, 55 feet southwest of, in north edge of road, in root on southeast side of 4.5-foot cedar tree, flush with ground; copper nail and washer, painted "172" on tree. Elevation, 3,909.26 feet.

[Latitude 37° 43′ 03.07″; longitude 119° 39′ 13.73″]

To station—	Azimuth	Distance
	° ′	*Feet*
Station No. 171	73 51	630.5
Station No. 173	263 34	485.5

Station No. 173, Bridal Veil checking station, 60 feet north of, 70 feet east of fork of Wawona road, 5 feet south of Valley road, in root 3 feet northwest of 4-foot cedar tree, flush with ground; copper nail and washer, painted on tree, "173." Elevation, 3,912.42 feet.

[Latitude 37° 43′ 03.61″; longitude 119° 39′ 07.73″]

To station—	Azimuth	Distance
	° ′	*Feet*
Station No. 172	83 34	485.5
Station No. 174	242 25	363.5

Station No. 174, Bridal Veil checking station, 360 feet east of, 80 feet east of culvert 325, 140 feet west of Bridal Veil Creek, on south wall of road, in north root of mountain maple, 6 inches below ground; small nail, painted on tree, "174." Elevation, 3,919.97 feet.

[Latitude 37° 43′ 05.27″; longitude 119° 39′ 03.72″]

To station—	Azimuth	Distance
	° ′	*Feet*
Station No. 173	62 25	363.5
Station No. 175	217 26	857.6

Station No. 175, culvert 328, 200 feet east of, 55 feet east of telephone pole surrounded by stones, on north wall of road, on highest point of rock, in painted circle; painted on rock, "175." Elevation, 3,929.88 feet.

[Latitude 37° 43′ 12.00″; longitude 119° 38′ 57.23″]

To station—	Azimuth	Distance
	° ′	*Feet*
Station No. 174	37 26	857.6
Station No. 176	234 05	940.0

Station No. 176, road southwest to Bridal Veil Falls, 75 feet east of boulder at fork, 12 feet north of north edge of road, on 7-inch triangular rock; chiseled point in painted mark, painted on stone, 3 feet northwest of station, 176 and arrow. Elevation, 3,935.13 feet.

[Latitude 37° 43′ 17.45″; longitude 119° 38′ 47.76″]

To station—	Azimuth	Distance
	° ′	*Feet*
Station No. 175	54 05	940.0
Station No. 177	287 30	363.4

Station No. 177, road southwest to Bridal Veil Falls, 300 feet east of, 4 feet south of road, 3 feet above road, on 2 by 3 foot rock; chiseled point in chiseled square, in painted square, painted "177" on rock. Elevation, 3,938.85 feet.

[Latitude 37° 43′ 16.37″; longitude 119° 38′ 43.45″]

To station—	Azimuth	Distance
	° ′	*Feet*
Station No. 176	107 30	363.4
Station No. 178	260 11	637.6

Station No. 178, El Capitan Bridge, 640 feet west of, 235 feet east of culvert No. 330, 18 feet west of telephone pole, 2 feet south of south edge of road; 1-inch gas pipe 3 inches above ground, painted white, painted on telephone pole, "178" and arrow. Elevation, 3, 944.42 feet.

[Latitude 37° 43′ 17.44″; longitude 119° 38′ 35.63″]

To station—	Azimuth	Distance
	° ′	*Feet*
Station No. 177	80 11	637.6
Station No 179	241 48	299.0

Station No. 179, El Capitan Bridge, 90 feet southwest of, 4 feet south of south edge of road, in 5-foot bank, on side of 3-foot triangular rock, 1 foot above ground; chiseled point in painted square, painted on rock, "179." Elevation, 3,950.17 feet.

[Latitude 37° 43′ 18.84″; longitude 119° 38′ 32.35″]

To station—	Azimuth	Distance
	° ′	*Feet*
Station No. 178	61 48	299.0
Station No. 145–C	174 27	299.8
Station No. 180	231 23	186.8

Station No. 180, p. b. m., El Capitan Bridge, 160 feet east of, 8 feet west of sprinkling station, 7 feet north of north edge of road, on top of 10-foot boulder; bronze tablet, painted on rock, "180." Elevation, 3,952.556 feet.

[Latitude 37° 43′ 19.99″; longitude 119° 38′ 30.53″]

To station—	Azimuth	Distance
	° ′	*Feet*
Station No. 179	51 23	186.8
Station No. 181	278 45	218.4

Station No. 181, El Capitan Bridge, 380 feet east of, on north edge of road, in root on southeast side of 3.5-foot fir tree with automobile warning signs, 2 inches below ground level; small nail, painted on tree, "181." Elevation, 3,959.31 feet.

[Latitude 37° 43′ 19.66″; longitude 119° 38′ 27.84″]

To station—	Azimuth	Distance
	° ′	*Feet*
Station No. 180	98 45	218.4
Station No. 182	294 58	566.4

Station No. 182, tree with fire tools on north side of road, 35 feet southwest of, on south edge of road, in root on north side of 3-foot oak tree, 8 inches below ground level; 10-penny nail, painted on tree, "182." Elevation, 3,966.12 feet.

[Latitude 37° 43′ 17.30″; longitude 119° 38′ 21.45″]

To station—	Azimuth	Distance
	° ′	*Feet*
Station No. 181	114 58	566.4
Station No. 183	281 27	828.0

Station No. 183, sprinkling tank No. 95, 110 feet southeast of, 120 feet east of culvert 332, opposite east road to sprinkling tank, 4 feet northeast of 2-foot oak tree, in south edge of road; 1-inch gas pipe flush with ground, painted on rock, "184." Elevation, 3,951.70 feet.

[Latitude 37° 43′ 15.68″; longitude 119° 38′ 11.35″]

To station—	Azimuth	Distance
	° ′	*Feet*
Station No. 182	101 27	828.0
Station No. 184	285 26	289.4

Station No. 184, sprinkling station, 25 feet east of, 3 feet north of north edge of road, on 3-foot rock, 1 foot below road; chiseled point in painted square, painted on rock, "184." Elevation, 3,954.00 feet.

[Latitude 37° 43′ 14.92″; longitude 119° 38′ 07.88″]

To station—	Azimuth	Distance
	° ′	*Feet*
Station No. 183	105 26	239.4
Station No. 185	293 21	324.6

Station No. 185, 7-foot cedar tree on north side of road, 25 feet south of, 1 foot south of south edge of road; point on north end of 1-foot rock, in painted square, painted on rock, "185." Elevation, 3,961.31 feet.

[Latitude 37° 43′ 13.65″; longitude 119° 38′ 04.17″]

To station—	Azimuth	Distance
	° ′	*Feet*
Station No. 184	113 21	324.6
Station No. 186	271 33	321.7

Station No. 186, second-class road northeast to meadow, 30 feet east of, on small rock in north wall of road, in painted square; chiseled point, painted on rock, "181." Elevation, 3,960.95 feet.

[Latitude 37° 43′ 13.56″; longitude 119° 38′ 00.17″]

To station—	Azimuth	Distance
	° ′	*Feet*
Station No. 185	91 33	321.7
Station No. 187	291 34	306.5

Station No. 187, 5-foot cedar tree on north side of road, 35 feet southeast of, 3 feet south of south side of road, 1 foot above road, 1 inch above ground; painted white "187" on stump 3 feet southwest of station. Elevation, 3,975.66 feet.

[Latitude 37° 43′ 12.45″; longitude 119° 37′ 56.62″]

To station—	Azimuth	Distance
	° ′	*Feet*
Station No. 186	111 34	306.5
Station No. 188	258 57	409.9

Station No. 188, 15 by 20 foot rock 10 feet high, 12 feet north of road, 75 feet southeast of, 60 feet southeast of 2-foot oak tree with Park Service placard on north side of road, 1 foot south of south edge of road, on 1-foot rock level with road; chiseled point in painted square, painted on rock, "188." Elevation, 3,982.62.

[Latitude 37° 43′ 13.23″; longitude 119° 37′ 51.61″]

To station—	Azimuth	Distance
	° ′	*Feet*
Station No. 187	78 57	409.9
Station No. 189	252 27	680.6

Station No. 189, culvert No. 335, 175 feet east of, opposite wood road northwest, 40 feet southwest of 4.5-foot pine tree, on south edge of road, in north side of 3-foot oak tree, level with road; copper nail and washer, painted, "189" on tree. Elevation, 3,968.91 feet.

[Latitude 37° 43′ 15.26″; longitude 119° 37′ 43.53″]

To station—	Azimuth	Distance
	° ′	*Feet*
Station No. 188	72 27	680.6
Station No. 190	250 47	234.0

Station No. 190, 7-foot cedar tree on south side of road, 125 feet west of, 5 feet south of south edge of road, in root 1 foot north of 2.5-foot cedar, 1 foot below road; copper nail and washer, painted on tree, "190." Elevation, 3,968.80 feet.

[Latitude 37° 43′ 16.00″; longitude 119° 37′ 40.78″]

To station—	Azimuth	Distance
	° ′	*Feet*
Station No. 189	70 47	234.0
Station No. 191	255 32	916.5

Station No. 191, at wood roads northeast and northwest, green post on north side of road, "Bear Pits" penciled on post, 210 feet west of, 5 feet south of south edge of road, 1 foot south of 2-foot oak tree, 1 foot north of forked oak; nail in root 4 inches below ground level, painted, "191" on tree. Elevation, 3,973.43 feet.

[Latitude 37° 43′ 18.28″; longitude 119° 37′ 29.74″]

To station—	Azimuth	Distance
	° ′	*Feet*
Station No. 190	75 32	916.5
Station No. 192	253 29	477.2

Station No. 192, culvert No. 336, 30 feet west of, 1 foot north of north edge of road, in root on south side of 3.5-foot cedar tree level with road; copper nail and washer, painted on tree, "192." Elevation, 3,974.74 feet.

[Latitude 37° 43′ 19.63″; longitude 119° 37′ 24.05″]

To station—	Azimuth	Distance
	° ′	*Feet*
Station No. 191	73 29	477.2
Station No. 193	251 47	780.6

Station No. 193, row of cedars and pines 5 feet high, on north side of road, on 10-foot wall, 115 feet east of, on 1-foot rock, on north wall of road; chiseled point in painted square, painted on rock "193." Elevation, 3,974.72 feet.

[Latitude 37° 43′ 22.04″; longitude 119° 37′ 14.82″]

To station—	Azimuth	Distance
	° ′	*Feet*
Station No. 192	71 47	780.6
Station No. 194	254 13	367.0

Station No. 194, 7-foot cedar tree 20 feet north of road, 40 feet south of, 1 foot south of south edge of road, 2 feet north of 1-foot cedar, on 4 by 4 inch rock; chiseled point in painted square, painted, "193." Elevation, 3,974.74 feet.

[Latitude 37° 43′ 23.03″; longitude 119° 37′ 10.42″]

To station—	Azimuth	Distance
	° ′	*Feet*
Station No. 193	74 13	367.0
Station No. 195	234 12	965.3

Station No. 195, 6-foot cedar tree north of road, 10 feet southeast of, on 6-inch by 2-foot rock, in north wall of road, 4 inches above road; chiseled point in painted square, painted on rock, "195." Elevation, 3,971.54 feet.

[Latitude 37° 43′ 28.61″; longitude 119° 37′ 00.67″]

To station—	Azimuth	Distance
	° ′	*Feet*
Station No. 194	54 12	965.3
Station No. 196	244 33	943.6

Station No. 196, culvert No. 338, 600 feet east of, 30 feet northeast of 3.5-foot pine tree on south edge of road, on 1 by 3 foot rock, in north wall of road, 1 foot above road; chiseled point in painted square, painted on rock, "196." Elevation, 3,970.70 feet.

[Latitude 37° 43′ 32.62″; longitude 119° 36′ 50.07″]

To station—	Azimuth	Distance
	° ′	*Feet*
Station No. 195	64 33	943.6
Station No. 197	253 56	995.1

Station No. 197, road north to sprinkler tank No. 94, 500 feet east of, 50 feet east of 7-foot cedar tree on north edge of road, on 6-inch by 2-foot rock, in north wall of road, 10 inches above road; chiseled point in painted square, painted on rock, "197." Elevation, 3,961.52 feet.

[Latitude 37° 43′ 35.34″; longitude 119° 36′ 38.17″]

To station—	Azimuth	Distance
	° ′	*Feet*
Station No. 196	73 56	995.1
Station No. 197	245 42	657.7

Station No. 198, culvert No. 339, 35 feet east of, 350 feet west of fire station south of road, on 10-inch rock in north wall of road, 3 inches above road; chiseled point in painted square, painted on rock, "198." Elevation, 3,961.06 feet.

[Latitude 37° 43′ 38.01″; longitude 119° 36′ 30.71″]

To station—	Azimuth	Distance
	° ′	*Feet*
Station No. 197	65 42	657.7
Station No. 199	235 48	772.8

Station No. 199, tree with fire tools south of road, 420 feet east of, 70 feet east of telephone guy-wire pole, 15 feet south of road, on 6 by 12 inch rock in south wall of road, 6 inches above road; chiseled point in painted square, painted on rock, "199." Elevation, 3,972.44 feet.

[Latitude 37° 43′ 42.3″; longitude 119° 36′ 22.75″]

To station—	Azimuth	Distance
	° ′	*Feet*
Station No. 198	55 48	772.8
Station No. 200	206 57	655.8

Station No. 200, culvert No. 340, 485 feet east of, 85 feet west of culvert No. 341, 220 feet east of 3-foot pine tree with two automobile warning signs, on south side of road, on 1-foot rock in south wall of road, 1 foot above road; chiseled point in painted square, painted on rock, "200." Elevation, 3,970.28 feet.

[Latitude 37° 43′ 48.08″; longitude 119° 36′ 19.05″]

To station—	Azimuth	Distance
	° ′	*Feet*
Station No. 199	36 57	655.8
Station No. 201	207 06	714.4

Station No. 201, culvert No. 342, 250 feet east of, 100 feet northwest of 4-foot cedar tree with automobile warning sign on south side of road, on 1 by 2 foot rock, in wall on north side of road, 1 foot above road; chiseled point in painted circle, painted on rock, "201." Elevation, 3,974.57 feet.

[Latitude 37° 43′ 54.37″; longitude 119° 36′ 15.00″]

To station—	Azimuth	Distance
	° ′	*Feet*
Station No. 200	27 06	714.4
Station No. 202	218 05	610.8

Station No. 202, second-class roads north and northwest, 140 feet west of culvert No. 344, 5 feet west of telephone pole, on 1 by 2 foot rock in north wall of road; chiseled point in painted square, painted on rock, "202." Elevation, 3,970.93 feet.

[Latitude 37° 43′ 59.12″; longitude 119° 36′ 10.31″]

To station—	Azimuth	Distance
	° ′	*Feet*
Station No. 201	38 05	610.8
Station No. 257	224 29	65.6
Station No. 203	227 42	879.9

Station No. 203, in Camp Ahwanee, 105 feet west of sprinkler station, on 8 by 24 inch rock in south wall of road, 8 inches above road; chiseled point in painted square, painted on rock, "203." Elevation, 3,970.59 feet.

[Latitude 37° 44′ 04.97″; longitude 119° 36′ 60.21″]

To station—	Azimuth	Distance
	° ′	*Feet*
Station No. 202	47 42	879.9
Station No. 204	215 57	410.2

Station No. 204, at east end of Camp Ahwanee, 3 feet north of north edge of road, on east side of top of 4-foot pine stump, 1 foot above road; copper nail and washer, painted on stump, "204." Elevation, 3,968.27 feet.

[Latitude 37° 44′ 08.25″; longitude 119° 35′ 59.21″]

To station—	Azimuth	Distance
	° ′	*Feet*
Station No. 203	35 57	410.2
Station No. 204	227 04	795.8

Station No. 205, house No. 34 on north side of road, 250 feet east of, opposite sprinkler station on south side of road, 4 feet north of north edge of road; small nail in burned top of stump painted white, painted on stump, "205." Elevation, 3,966.58 feet.

[Latitude 37° 44′ 13.61″; longitude 119° 35′ 51.96″]

To station—	Azimuth	Distance
	° ′	*Feet*
Station No. 204	47 04	795.8
Station No. 206	235 29	784.8

Station No. 206, on west edge of Yosemite Meadow, 400 feet east of culvert No. 348, 10 feet south of south edge of road, on 2 by 2 foot rock, 4 inches above ground; chiseled point in painted square, painted on rock, "207." Elevation, 3,958.93 feet.

[Latitude 37° 44′ 18.01″; longitude 119° 35′ 43.91″]

To station—	Azimuth	Distance
	° ′	*Feet*
Station No. 205	55 29	784.8
Station No. 207	227 52	1,036.3

Station No. 207, Yosemite post office, 880 feet west of, 25 feet southeast of 2.5-foot cottonwood tree, on 8 by 10 inch rock, in north wall of road; chiseled point in painted circle, painted on rock, "207." Elevation, 3,957.88 feet.

[Latitude 37° 44′ 24.88″; longitude 119° 35′ 34.34″]

To station—	Azimuth	Distance
	° ′	*Feet*
Station No. 206	47 52	1,036.3
Station No. 208	221 05	752.9

Station No. 208, at west end of Yosemite village, between post office and church, on south side of road, in root 1 foot north of 7-foot oak tree, 4 inches above road; painted, "208" on tree. Elevation, 3,957.25 feet.

[Latitude 37° 44′ 30.49″; longitude 119° 35′ 28.18″]

To station—	Azimuth	Distance
	° ′	*Feet*
Station No. 207	41 05	752.9
Station No. 209	200 33	358.1

Station No. 209, Administration Building in Yosemite village, in front of east end of, on south side of 3-foot oak tree, 4 inches above road; copper nail and washer (not painted). Elevation, 3,960.39 feet.

[Latitude 37° 44′ 33.81″; longitude 119° 35′ 26.61″]

To station—	Azimuth	Distance
	° ′	*Feet*
Station No. 208	20 33	358.1
Station No. 210	229 01	506.9

Station No. 210, Sentinel bridge, on east side of approach to south end of, 20, inches south of expansion joint, 2 inches east of west edge of concrete walk; nail hole in chiseled cross in white painted circle, no figures painted. Elevation, 3,964.42 feet.

[Latitude 37° 44′ 37.10″; longitude 119° 35′ 21.85″]

To station—	Azimuth	Distance
	° ′	*Feet*
Station No. 209	49 01	506.9
Station triangular station	197 04	286.4

From point near El Capitan Bridge north along highways 0.2 mile

Station No. 145–C, El Capitan Bridge, 125 feet north of, on east edge of road, on southwest corner of 2 by 3 foot rock, 1 foot above ground; chiseled point in painted circle, painted on rock, "145-C." Elevation, 3,953.19 feet.

[Latitude 37° 43′ 21.79″; longitude 119° 38′ 32.70″]

To station—	Azimuth	Distance
	° ′	*Feet*
Station No. 179	354 27	299.8
Station No. 145–B	166 48	193.4

Station No. 145–B, El Capitan Bridge, 320 feet north of, 1 foot east of east edge of road, on 2 by 2 foot rock, 1 foot above ground; chiseled point in chiseled square, painted on rock, "145–B." Elevation, 3,960.56 feet.

[Latitude 37° 43′ 23.65″; longitude 119° 38′ 33.25″]

To station—	Azimuth	Distance
	° ′	*Feet*
Station No. 145–C	346 48	193.4
Station No. 145–A	148 44	300.4

Station No. 145–A, triangle in roads southeast of El Capitan checking station, 55 feet south of south corner of, 3 feet east of east edge of road, in root of 4-foot pine tree, 2 feet west of trunk, 6 inches below ground level; 10-penny nail, painted on tree, "145–A." Elevation, 3,967.14 feet.

[Latitude 37° 43′ 26.18″; longitude 119° 38′ 35.18″]

To station—	Azimuth	Distance
	° ′	*Feet*
Station No. 145–B	328 44	300.4
Station No. 145	111 54	279.8

Cross line from Station No. 202 west along old ford road to Station No. 122

Station No. 257, second-class roads north and northwest at west end of culvert No. 344, 75 feet west of, on 8-inch rock in north wall of road; chiseled point in painted square, painted on rock, "257." Elevation not determined.

[Latitude 37° 43′ 59.58″; longitude 119° 36′ 09.74″]

To station—	Azimuth	Distance
	° ′	*Feet*
Station No. 202	44 29	65.6
Station No. 256	130 33	454.4

Station No. 256, signboard "The Big Pine," 400 feet east of, at square turn in road to west, 15 feet east of east edge of road at bend, between 16-inch oak and 1-foot cedar, in 2-inch stake, 3 inches above ground; painted on 24-inch oak tree, "256."

[Latitude 37° 44′ 02.50″; longitude 119° 36′ 14.04″]

To station—	Azimuth	Distance
	° ′	*Feet*
Station No. 257	310 33	454.4
Station No. 255	61 13	792.3

Station No. 255, east end of clearing, 190 feet east of, on bend in road to north, 1 foot south of south side of road, 3 feet north of 18-inch pine tree, in 1-inch hub, 3 inches below road; small nail, painted on tree, "255."

[Latitude 37° 43′ 58.73″; longitude 119° 36′ 22.68″]

To station—	Azimuth	Distance
	° ′	*Feet*
Station No. 256	241 13	792.3
Station No. 254	77 15	501.6

Station No. 254, 30 feet north of north edge of road, 17 feet north of lone 1-inch pine tree 5 feet high, in top of 2.5-foot pine stump 1 foot high; 10-penny nail, painted on stump, "254."

[Latitude 37° 43′ 57.64″; longitude 119° 36′ 28.77″]

To station—	Azimuth	Distance
	° ′	*Feet*
Station No. 255	257 15	501.6
Station No. 253	36 57	256.6

Station No. 253, east bank of river at ford, 230 feet east of, 12 feet north of road 1 foot south of 8-inch pine tree, in root 8 inches below ground level; 10-penny nail; painted on tree, "253."

[Latitude 37° 43′ 55.61″: longitude 119° 36′ 30.70″]

To station—	Azimuth	Distance
	° ′	*Feet*
Station No. 254	216 57	256.6
Station No. 252	34 19	301.1

Station No. 252, 15 feet from west bank of river at ford, 6 feet north of road, 8 feet west of willow tree, 4 feet above road; 1-inch gas pipe 2 inches above ground, painted white, marked "252" on stump with red keel.

[Latitude 37° 43′ 53.15″; longitude 119° 36′ 32.81″]

To station—	Azimuth	Distance
	° ′	*Feet*
Station No. 253	214 19	301.1
Station No. 251	72 31	277.7

Station No. 251, large four-pronged cottonwood tree on north side of road, 35 feet west of, 5 feet southwest of 2-foot pine tree, 3 feet north of north edge of road; 1-inch gas pipe 2 inches above ground, painted white, painted on pine, "251."

[Latitude 37° 43′ 52.33″; longitude 119° 36′ 36.11″]

To station—	Azimuth	Distance
	° ′	*Feet*
Station No. 252	252 31	277.7
Station No. 122	55 22	311.4

DEGREE QUADRANGLE 37°–38°, 120°–121°

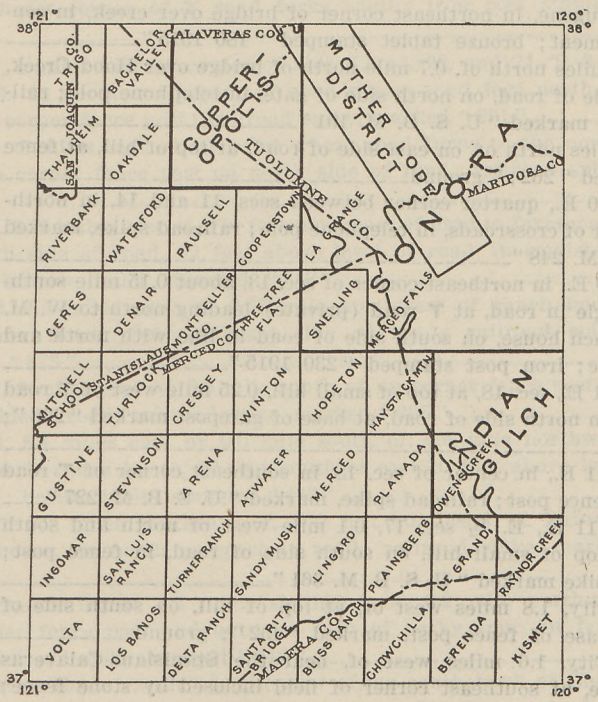


FIGURE 34.—Diagram of degree quadrangle 37°–38°, 120°–121°

BACHELOR VALLEY QUADRANGLE

[Latitude 37° 52′ 30″–38°; longitude 120° 45′–120° 52′ 30″]

CALAVERAS AND STANISLAUS COUNTIES

Primary leveling by D. S. Birkett in 1915

From point 1.4 miles east of Farmcottage School along highways east to Eugene, thence north 3.5 miles, thence east to center of sec. 15, T. 1 N., R. 11 E.

	Feet
St. Joseph's Church, in front of lower step; ground	161.1
T. 1 N., R. 10 E., center of sec. 34, in southeast corner of T road south leading to ranch house, in base of telephone pole; nail, marked "U. S. B. M. 169"	169.32
Eugene, at east entrance to general store, in concrete platform; aluminum tablet stamped "177 1915"	177.016
T. 1 N., R. 10 E., quarter corner between secs. 26 and 35, in road; top of 2 by 3 inch stake	181.60

	Feet
Eugene, 1 mile north of, 30 feet south of east and west fence, on west side of road, in gatepost; railroad spike, marked "U. S. B. M. 184"	184.08
Eugene, 1.5 miles north of, in northeast corner of T road east, in large corner fence post; railroad spike, marked "U. S. B. M. 213"	213.04
T. 1 N., R. 10 E., about 0.2 mile south of center of sec. 23, 2 miles north of Eugene, in northeast corner of bridge over creek, in concrete abutment; bronze tablet stamped "180 1915"	180.800
Eugene, 2.6 miles north of, 0.7 mile north of bridge over Hood Creek, on west side of road, on north side of gate, in telephone pole; railroad spike, marked "U. S. B. M. 191"	191.85
Eugene, 3 miles north of, on east side of road, at top of hill, at fence post marked "262;" ground	262.5
T. 1 N., R. 10 E., quarter corner between secs. 11 and 14, in northwest corner of crossroads, in telephone pole; railroad spike, marked "U. S. B. M. 248"	248.97
T. 1 N., R. 10 E., in northeast corner of sec. 13, about 0.15 mile southeast of angle in road, at T road (private) leading north to W. M. Snow's ranch house, on south side of road in line with north and south fence; iron post stamped "230 1915"	230.612
T. 1 N., R. 11 E., sec. 18, at top of small hill, 0.25 mile west of T road to south, on north side of road, at base of gatepost marked "236"; ground	236.4
T. 1 N., R. 11 E., in center of sec. 18, in southeast corner of T road south, in fence post; railroad spike, marked "U. S. B. M. 227"	227.70
T. 1 N., R. 11 E., E. ½ sec. 17, 0.1 mile west of north and south fence, at top of small hill, on south side of road, in fence post; railroad spike marked "U. S. B. M. 361"	361.96
Telegraph City, 1.8 miles west of, at top of hill, on south side of road, at base of fence post, marked "492"; ground	492.3
Telegraph City, 1.6 miles west of, near the Stanislaus-Calaveras county line, at southeast corner of field inclosed by stone fence; point on rock, marked "U. S. B. M. 460"	460.07
Telegraph City, 0.8 mile west of, in sec. 15, T. 1 N., R. 11 E., at angle in road, 150 feet east by 350 feet south of old ranch, on north side of road; iron post stamped "505 1915"	505.476

BERENDA, KISMET, LE GRAND, AND RAYNOR CREEK QUADRANGLES

[Latitude 37°–37°15′; longitude 120°–120° 15′]

MADERA, MARIPOSA, AND MERCED COUNTIES

Primary leveling by Roscoe Reeves in 1915

From Le Grand along highways east and southeast to Daulton, thence west along township-line road to sec. 3, T. 10 S., R. 16 E.

	Feet
Le Grand, 20 feet southwest of Santa Fe passenger station, just outside southeast corner of station gardens; iron post stamped "252"	253.162

	Feet
Le Grand, 1 mile east of, 600 feet east of point where road jogs 50 feet south, in east gatepost on south side of road; railroad spike, marked "259"	259.29
Le Grand, 2 miles east of, 250 feet east of farmhouse, on west gatepost to second-class road leading south; railroad spike, marked "269"	269.66
Le Grand, 2.85 miles east of, 275 feet southwest of Vineyard School, in southeast corner of T road forks south; iron post stamped "279"	279.584
Le Grand, 4 miles east of, corner of secs. 13, 14, 23, and 24, T. 8 S., R. 16 E., in northwest corner of road where road jogs north 70 feet, in corner fence post; railroad spike, marked "291"	291.79
Le Grand, 5 miles east of, at point where road turns to the northeast, on corner fence post on north side of road; railroad spike, marked "312"	312.47
Le Grand, 6.25 miles east of, 170 feet northeast of gate to farmhouse, on north side of road, 12 feet above level of road, in sandstone ledge; bronze tablet stamped "343"	343.856
Le Grand, 7.5 miles east of, 0.37 mile northwest of ranch house, on corner fence post northeast side of road; railroad spike, marked "373"	373.98
Le Grand, 8 miles east of, 0.5 mile south of, in corner fence post on north side of road; railroad spike, marked "395"	395.70
Le Grand, 8.4 miles east by 0.5 mile south of, 0.8 mile northwest of Rainer's ranch house, 50 feet south of and 10 feet above level of road; bronze tablet stamped "419"	419.841
Le Grand, 9.7 miles southeast of, 500 feet southeast of Rainer's ranch house, on north gatepost to road; railroad spike, marked "415"	416.08
Rainer's ranch house, 1.3 miles southeast of, 0.2 mile northwest of corner fence post and gate, on face of rocky spur, in fence post; railroad spike, marked "442"	442.54
"The Sharon Home ranch," 1 mile east of, on south bank of Chowchilla River, 50 feet east of the western and 200 feet west of the eastern of two fences crossing stream, in base of cottonwood tree; railroad spike, marked "344"	344.83
"The Sharon Home ranch," about 1 mile east of, 1,500 feet south of Chowchilla River, 90 feet north of second-class road, 160 feet north of old river bank; standard iron post stamped "346"	346.672
"The Sharon Home ranch," 1.5 miles southeast of, 200 feet southwest of road to Daulton, on corner fence post; railroad spike, marked "393"	393.41
Daulton, 4.3 miles northwest of, 0.23 mile southeast of gate, 50 feet southwest of road; painted circle on rock, "395"	395.36
Daulton, 2 miles west of, 1.1 miles north of, 0.9 mile north of ranch house, in corner fence post on east side of road; railroad spike, marked "380"	380.58
Daulton, 2 miles west of, 400 feet south of T-road forks west, 200 feet southwest of ranch house, in east end of concrete culvert; aluminum tablet stamped "362"	362.923
Daulton, 2 miles southwest of, on line of secs. 33 and 4, Tps. 9 and 10 S., R. 18 E., on east side of road, in base of telephone pole; railroad spike, marked "370"	370.69

	Feet
T. 9 S., R. 18 E., southeast corner of sec. 32, in section-corner post; railroad spike, marked "369"	369.63
T. 9 S., R. 18 E., 100 feet north of southeast corner of sec. 31, east side of second-class road; iron post, marked "352"	352.154
T. 9. S., R. 17 E., southeast corner of sec. 36, 4 miles east of Sharon, in corner fence post; railroad spike, marked "322"	322.35
Sharon, 3 miles east of, 200 feet northeast of southeast corner of sec. 35, T. 9 S., R. 17 E., T-road forks west, in telephone pole; railroad spike, marked "304"	304.07
Sharon, 2.08 miles east of, opposite farmhouse, on south side of road; iron post stamped "309"	309.643
Sharon, 0.25 mile south of, 50 feet northwest of railroad crossing, in telephone pole; railroad spike, marked "295"	295.13
Sharon, 1 mile west of, southeast corner of sec. 31, T. 9 S., R. 17 E., 60 feet southwest of crossroads; iron post, marked "285"	285.512
T. 9 S., R. 16 E., southeast corner of sec. 36, south side of road, in telephone pole; railroad spike, marked "271"	271.04
Sharon, 2.9 miles west of, 700 feet east of farmhouse, north side of road, in telephone pole; railroad spike, marked "266"	266.76
Sharon, 3.5 miles west of, at quarter corner on south side of sec. 35, T. 9 S., R. 16 E., in northwest corner of crossroads, in telephone pole; railroad spike, marked "264"	264.85
Sharon, 4.15 miles west of, in northwest corner of crossroads, in power-line pole; railroad spike, marked "259"	259.29
Minturn, 4.9 miles southeast of, opposite milepost 172 on Southern Pacific R. R. (see Bull. 342, p. 17, described as milepost 173); iron post stamped "247"	247.183

BLISS RANCH, CHOWCHILLA, LINGARD, AND PLAINSBERG QUADRANGLES

[Latitude 37°–37° 15′; longitude 120° 15′–120° 30′]

MADERA AND MERCED COUNTIES

Primary leveling by Roscoe Reeves in 1915

From sec. 2, T. 10 S., R. 14 E., along highways north and northwest to sec. 24, T. 9 S., R. 14 E.

	Feet
T. 10 S., R. 14 E., near north quarter corner of sec. 2, 1.7 miles south by 8.5 miles west of Chowchilla, 0.2 mile south of ranch house, 15 feet east of T in fences, in fence post; spike, marked "171" (D. S. Birkett, 1912–13)	171.08
T. 9 S., R. 14 E., sec. 26, 1 mile northeast of Bliss ranch house, 0.2 mile south of triangulation station, in fence post; spike, marked "175"	175.42
T. 9 S., R. 14 E., sec. 26, 1.2 miles northeast of Bliss Ranch house, triangulation station; iron post stamped "184"	184.397
T. 9. S., R. 14 E., near north quarter corner of sec. 28, in large fence post at wire gate; railroad spike, marked "162.5"	163.00
T. 9 S., R. 14 E., southwest corner of sec. 21, in top of section corner post; nail	158.74
T. 9 S., R. 14 E., about 25 feet southeast of southwest corner of sec. 20, 2 miles north of Chowchilla home ranch; iron post stamped "149"	149.841

	Feet
T. 9 S., R. 13 E., southeast corner of sec. 24, 2 miles north by 0.5 mile west of Chowchilla home ranch, in northeast corner of T-road forks east, in telephone pole; railroad spike, marked "143"	143.11

From Le Grand along highways west to Plainsberg School

Le Grand, 1.2 miles west of, in first telephone pole east of cross-roads at corners of secs. 13 and 24, T. 8 S., R. 15 E., and secs. 18 and 19, T. 8 S., R. 16 E.; railroad spike, marked "241"	242.18
Le Grand, 2.2 miles west of, in base of first telephone pole north of corner of roads north and east and corner of secs. 13, 14, 23, and 24, T. 8 S., R. 15 E.; railroad spike, marked "232"	232.82
Le Grand, 3.2 miles west of, 50 feet southwest of crossing of second-class road; iron post stamped "225"	225.455
Plainsberg School, 4.2 miles west of Le Grand, on northeast corner of T-road forks east, in base of power-line pole; railroad spike, marked "216"	217.14

Primary leveling by D. S. Birkett in 1913

From Lingard west along highway to sec. 13, T. 8 S., R. 13 E.

Lingard, opposite signboard; top of rail	182.2
Lingard, 1.5 miles west of, 100 feet south of P. J. Wolfjen ranch house, south side of road; spike in gatepost, marked "U. S. 175 B. M."	175.93
T. 8 S., R. 14 E., a quarter of a mile south of southwest corner sec. 10, at T road east to Lingard, northeast corner of intersection; spike in fence post, marked "U. S. 171 B. M."	171.61
T. 8 S., R. 14 E., southeast corner sec. 16, 5 miles south by 3 miles east of Merced, northwest corner of T road; iron post stamped "170 1913"	170.080
T. 8 S., R. 14 E., near corner of secs. 16, 17, 20, and 21, 5 miles south by 2 miles east of Merced, south side of road; spike in fence post, marked "U. S. 161 B. M."	161.97
T. 8 S., R. 14 E., 0.4 mile west of southeast corner sec. 18, 5 miles south by 1 mile east of Merced, 150 feet west of north-south fence, south side of road; spike in telephone pole, marked "U. S. 153 B. M."	153.42
T. 8 S., R. 14 E., near southwest corner sec. 18, 5 miles south of Merced, northeast corner of T road; iron post stamped "148 1913"	148.725
T. 8 S., R. 13 E., southwest corner sec. 13, 5 miles south by 1 mile west of Merced, at point where fence running south intersects electric-power line; spike in base of power-line pole, marked "U. S. 144 B"	144.49

From sec. 3, T. 10 S., R. 13 E., east along highway to Chowchilla

T. 10 S., R. 13 E., southwest corner sec. 1, 2.7 miles south by 14 miles west of Chowchilla, 0.9 mile south by 1.5 miles west of Chowchilla ranch house, 15 feet east of north-south fence, north side of road; spike in fence post, marked "U. S. 130 B. M."	130.62

	Feet
T. 10 S., R. 13 E., northeast corner sec. 12, 0.9 mile south by 0.5 mile west of Chowchilla ranch house, at angle in road, south side of road; spike in gatepost marked "U. S. 137 B. M."	137.58
T. 10 S., R. 13 E., northeast corner sec. 1, 1.7 miles south by 13 miles west of Chowchilla, 0.1 mile north by 0.5 mile west of Chowchilla ranch house, west side of road, 30 feet south of east-west fence; iron post stamped "138 1913"	137.854
T. 10 S., R. 14 E., NE. ¼ sec. 5, 0.3 mile east of Chowchilla ranch house, east end of lane of tall trees, southwest corner of cattle corral; spike in corner fence post marked "U. S. 148 B. M"	148.41
T. 10 S., R. 14 E., near north quarter corner sec. 4, 2 miles east of Chowchilla ranch house, 12 feet south of intersection of fences; spike in gatepost, marked "U. S. 156 B. M."	156.63
T. 10 S., R. 14 E., near quarter corner on north boundary sec. 3, 3 miles east of Chowchilla ranch house, 33 feet west by 33 feet south of intersection of fences, at T fence running north; iron post stamped "163 1913"	163.085
T. 10 S., R. 14 E., near north quarter corner sec. 2, 1.7 miles south by 8.5 miles west of Chowchilla, 0.5 mile south of ranch house, 15 feet east of T in fences; spike in fence post, marked "U. S. 171 B. M."	171.05
T. 10 S., R. 14 E., northeast corner sec. 1, 1.7 miles south by 7 miles west of Chowchilla, 12 feet south of intersection of fences; spike in gatepost, marked "U. S. 182 B. M."	181.98
T. 9 S., R. 15 E., southwest corner sec. 32, 30 feet east by 30 feet north of, 1 mile west of Ash Creek, 1.7 miles south by 6 miles west of Chowchilla; iron post stamped "188 1913"	188.002
T. 9 S., R. 15 E., near southwest corner sec. 33, 1.7 miles south by 5 miles west of Chowchilla, on east bank of Ash Creek; spike in telephone pole, marked "U. S. 199 B. M."	199.39
T. 9 S., R. 15 E., 100 feet east of southwest corner sec. 34, 1.7 miles south by 4 miles west of Chowchilla; spike in telephone fence post, marked "U. S. 202 B. M."	202.08
T. 10 S., R 15 E., near northeast corner sec. 3, 1.7 miles south by 3 miles west of Chowchilla, 40 feet south by 20 feet west of concrete monument; iron post stamped "208 1913"	208.052
T. 9 S., R. 15 E., near south quarter corner sec. 36, at intersection of south boundary of sec. 36 with Robertson Bvd.; spike in telephone pole, marked "U. S. 221 B. M."	221.08
Chowchilla station, 0.7 mile south by 0.6 mile west of, at angle in Robertson Bvd., west side of boulevard, 200 feet north of road leading west to old ranch house; spike in telephone pole, marked "U. S. 228 B. M."	228.27

From sec. 10, T. 11 S., R. 14 E., north along highway to sec. 3, T. 10 S., R. 14 E.

T. 11 S., R. 14 E., 0.2 mile south of northwest corner sec. 3, or northwest corner Bk. 3, Chowchilla subdivision No. 3, 150 feet west of crossing of section line with northeast-southwest fence, 30 feet west of gate; spike in fence post, marked "U. S. 138 B. M."	138.93
T. 10 S., R. 14 E., quarter corner between secs. 33 and 34, or quarter corner between Bks. 36 and 37, Chowchilla subdivision No. 4; top of corner post	141.83
T. 10 S., R. 14 E., southwest corner sec. 27, or southwest corner Bk. 30, Chowchilla subdivision No. 4; top of post	144.93

	Feet
T. 10 S., R. 14 E., quarter corner between secs. 27 and 28, or quarter corner between Bks. 30 and 31, Chowchilla subdivision No. 4; top of corner post	145.22
T. 10 S., R. 14 E., 300 feet west by 80 feet north of southwest corner sec. 22, or southwest corner Bk. 25, Chowchilla subdivision No. 4, bridge in levee over small creek bed, in southeast corner; spike, marked "U. S. 145 B. M."	145.46
T. 10 S., R. 14 E., 75 feet east of southwest corner sec. 15, or northwest corner Bk. 25, Chowchilla subdivision No. 4, on east-west fence; spike in fence post, marked "U. S. 153 B. M."	154.03

CERES, DENAIR, RIVERBANK, AND WATERFORD QUADRANGLES

[Latitude 37° 30′–37° 45′; longitude 120° 45′–121°]

STANISLAUS COUNTY

Primary leveling by D. S. Birkett in 1912–13

From point 1.6 miles southeast of Modesto along highways east to Hickman, thence north 3.5 miles, thence west and north to point 1.1 miles east of Rurwood School

	Feet
Modesto, 2.3 miles southeast of, at intersection of Southern Pacific R. R. and east-west road; midway between cattle guards 115 C and 115 D; top of rail	90.1
T. 4 S., R. 9 E., northwest corner of sec. 11, 100 feet east of Ceres highway, south side of road, south side of concrete head gate; chiseled square in top, marked "U. S. 97 B. M."	97.35
T. 4 S., R. 9 E., southwest corner of sec. 1, 3 miles east by 2 miles south of Modesto, north side of road; iron post stamped "100 1912"	100.304
T. 4 S., R. 10 E., 800 feet west of northwest corner of sec. 7, south side of road; spike in telephone pole, marked "U. S. 108 B. M."	107.93
T. 4 S., R. 10 E., 500 feet east of corner of secs. 5, 6, 7, and 8, south side of road, north end of concrete irrigation weir; cross in circle, marked "U. S. 115 B. M." (probably county bench mark, marked "Elev. 114.42 B. M.")	115.31
Crossing of Santa Fe Ry., with east-west road, 300 feet southeast of milepost 1087; top of rail	121.1
T. 4 S., R. 10 E., near quarter corner of secs. 4 and 9, 1 mile north by 0.3 mile west of Hughson, south side of road, north end of concrete weir, in top; aluminum tablet stamped "124 1912"	124.036
Hughson, 1 mile north by 0.3 mile east of, south side of road, in top of north end of concrete weir; chiseled square, marked "U. S. 126 B. M."	126.60
T. 4 S., R. 10 E., southwest corner of sec. 2, at point where Ceres Main Branch irrigation ditch after runnning southwest again turns due west, north side of road; spike in gatepost, marked "U. S. 131 B. M."	131.72
Hickman, 3.2 miles west by 0.7 mile south of, 0.2 mile west of point where Ceres Main Branch turns due west, on top of fill for irrigation ditch, north side of road; spike in telephone pole, marked "U. S. 144 B. M."	144.50

	Feet
T. 4 S., R. 11 E., in SW. ¼ sec. 1, 3 miles west by 0.7 mile south of Hickman, top of concrete weir of Ceres irrigation ditch, top of middle concrete partition; aluminum tablet stamped "145 1912"	145.395
T. 4 S., R. 11 E., SE. ¼ sec. 6, 2 miles west by 0.8 mile south of Hickman, south side of concrete weir of Ceres Main Branch irrigation ditch, on top; chiseled square, marked "U. S. 150 B. M."	150.15
Hickman, 0.9 mile south by 1 mile west of, at bridge where north-south road crosses Ceres Main Branch irrigation ditch, near cattle pen, north side of road; spike in telephone pole, marked "U. S. 158 B. M."	158.65
T. 4 S., R. 11 E., near quarter corner between secs. 4 and 9, at point where Ceres Main Branch leaves main canal, in top of north end of north concrete weir; aluminum tablet stamped "159 1912"	159.042
T. 4 S., R. 11 E., near quarter corner between secs. 3 and 4, where irrigation lateral intersects east-west road, 0.3 mile west of Southern Pacific R. R.; spike in telephone pole, marked "U. S. 165 B. M."	164.99
Hickman, 1,000 feet west by 1,200 feet north of railroad station, 150 feet south of T in roads, east end of concrete culvert, on top; chiseled square, marked "U. S. 170 B. M."	170.45
Crossing of Hickman-Waterford highway with Southern Pacific R. R., 0.3 mile northwest of Hickman; top of rail	169.73
Waterford, 0.2 mile south of station, at steel railroad bridge over Tuolumne River, north end of bridge, top of granite coping of concrete abutment, southeast corner; aluminum tablet stamped "160 1912"	160.141
Waterford, in front of semaphore at station; top of rail, marked "166.9"	167.2
Waterford, 1 mile northwest of, on east end of concrete culvert 131 of Southern Pacific R. R.; chiseled square, marked "U. S. 158 B. M."	158.33
Waterford, 2.3 miles north of, 0.5 mile north of Dry Creek bridge, west side of road; spike in corner fence post, marked "U. S. 159 B. M."	159.74
T. 3 S., R. 11 E., southeast corner of sec. 5, 1 mile south of Robinson School, 30 feet north of east-west fence, west side of road; iron post stamped "198 1912"	197.923
T. 3 S., R. 11 E., northeast corner sec. 5, northeast corner of Robinson School yard, at T in roads; spike in fence post, marked "U. S. 216 B. M."	216.80
T. 2 S., R. 11 E., northwest corner sec. 33, at end of lane running east on section line; spike in base of gatepost, marked "U. S. 222 B. M."	222.78
T. 2 S., R. 11 E., southwest corner sec. 21, 40 feet east of present north-south fence, north side of road; iron post stamped "241 1912"	241.513
T. 2 S., R. 11 E., northeast corner sec. 30, at T in roads, private road leading south, south side of road; spike in gatepost, marked "U. S. 222 B. M."	222.38
T. 2 S., R. 10 E., 800 feet west by 200 feet north of southeast corner sec. 24, at crossing of Oakdale-La Grange highway with irrigation ditch, south side of road, in top of concrete arch; aluminum tablet stamped "210 1912"	210.508

	Feet
T. 2 S., R. 10 E., at point where east-west road turns north on west edge of sec. 24, 2.5 miles southeast of Oakdale; spike in fence post, marked "U. S. 203 B. M."	203. 49
Oakdale, 2 miles south of, crossing of north-south road with Southern Pacific R. R., between cattle guards 124 C and 124 D; top of rail	192. 68
T. 2 S., R. 10 E., center of sec. 26, 2 miles south of Oakdale; spike in gatepost, marked "U. S. 192 B. M."	192. 06
T. 2 S., R. 10 E., center of sec. 27, 4.5 miles east of Riverbank, south side of road; spike in gatepost, marked "U. S. 174 B. M."	174. 37
T. 2 S., R. 10 E., center of sec. 28, 3.25 miles east of Riverbank, at T in roads, 50 feet east of road leading north, south side of road; spike in fence post, marked "U. S. 181 B. M."	180. 98
T. 2 S., R. 10 E., center of sec. 29, 2.5 miles east of Riverbank, at T in telephone line, southeast corner of intersection of roads; iron post stamped "157 1912"	156. 890
T. 2 S., R. 10 E., center of sec. 30, 1.5 miles east of Riverbank, at T in road, southeast corner of intersection; spike in telephone pole, marked "U. S. 154 B. M."	154. 64
Riverbank, 0.5 mile east of, at T in road, private road leading south; spike in telephone pole, marked "U. S. 138 B. M."	137. 99
Riverbank, in front of Santa Fe Ry. station, on main line; top of rail	135. 7
Riverbank, 230 feet west by 150 feet south of Santa Fe Ry. station, 10 feet north of edge of road; iron post stamped "133 1912"	132. 942
Riverbank, 0.6 mile northwest of, south end of approach to Santa Fe Ry. steel bridge over Stanislaus River, west side of railroad; top of concrete abutment; chiseled square on top	127. 70

Precise leveling by C. H. Semper in 1901–2

From Modesto southeast along Southern Pacific R. R. to Turlock

Modesto, 1.6 miles south of, 10 feet south of milepost 116, west side of track, at fence line; iron post stamped "86 B"	86. 594
Ceres, in front of station; top of rail	88. 8
Esmar, in front of station; top of rail	93. 8
Keyes, opposite milepost 122, 75 feet east of side track, on west edge of highway; iron post stamped "92 B"	92. 817
Keyes, 2.9 miles south of, opposite milepost 125, east side of track, at fence line; iron post stamped "100 B"	100. 626
Turlock, in front of station; top of rail	101. 5

COOPERSTOWN, MONTPELLIER, PAULSELL, AND THREE TREE FLAT QUADRANGLES

[Latitude 37° 30′–37° 45′; longitude 120° 30′–120° 45′]

MERCED AND STANISLAUS COUNTIES

Primary leveling by D. S. Birkett in 1913

From point 3 miles southwest of La Grange west along highway to Hickman

	Feet
La Grange, 3.3 miles southwest of, west end of highway bridge over small creek, south side of road; spike in end post of guard rail marked "U. S. 162 B. M."	162. 58

POLITECHNIKA GDAŃSKA ZAKŁAD GEOLOGII

	Feet
T. 4 S., R. 13 E., NW. ¼ sec. 2, 4.4 miles southwest of La Grange, 0.3 mile north of Lafayette School, northwest corner of highway bridge crossing Turlock irrigation canal, in top of concrete abutment; aluminum tablet stamped "248 1913"	248.680
T. 4 S., R. 13 E., on north edge of sec. 10, near quarter corner between secs. 3 and 10, 1 mile west of Lafayette School, at fork in road, private road turning north; spike in gatepost marked "U. S. 236 B. M."	236.42
T. 4 S., R. 13 E., near quarter corner between secs. 4 and 9, 7.2 miles southwest of La Grange, 100 feet south of point where Turlock ditch turns due west, south side of road; spike in gatepost marked "U. S. 233 B. M."	233.60
T. 4 S., R. 13 E., northeast corner of sec. 8, 7.6 miles southwest of La Grange, at T in roads, road leading south in lane of shade trees to the Alf Davis place, southwest corner of intersection of road; iron post stamped "225 1913"	224.953
T. 4 S., R. 12 E., near southeast corner sec. 1, at point where fill on Turlock ditch ends and cut through hill begins, north side of ditch; spike in telephone pole marked "U. S. 220 B. M."	220.53
T. 4 S., R. 12 E., near quarter corner between secs. 1 and 2, 8 miles east by 0.5 mile south of Hickman, at point where highway leaves Turlock ditch, north side of road; spike in fence post marked "U. S. 207 B. M."	206.99
T. 4 S., R. 12 E., center of sec. 2, 7.4 miles east by 0.5 mile south of Hickman, at T in roads, northwest corner of intersection; spike in fence post marked "U. S. 210 B. M."	210.39
T. 4 S., R. 12 E., 0.2 mile east of quarter corner between secs. 3 and 4, at angle in road, 30 feet east of north-south fence, north side of road; iron post stamped "193 1913"	193.344
T. 4 S., R. 12 E., on north-south line between secs. 4 and 5, 5 miles east of Hickman, near Basso ranch, at T in road, northwest corner of intersection; spike in fence post marked "U. S. 193 B. M."	193.03
T. 4 S., R. 12 E., NE. ¼ sec. 6, 3.8 miles east of Hickman, at Forrest Huddleson's ranch, in top of concrete watering tank in barnyard, north side; chiseled square	202.77
Hickman, 3 miles east of, NE. ¼ sec. 1, T. 4 S., R. 11 E., at highway bridge crossing Highline irrigation ditch, south side of road, west end of concrete guard rail, in top; aluminum tablet stamped "185 1913"	185.868
T. 4 S., R. 11 E., northeast corner of sec. 2, at wooden highway bridge crossing irrigation ditch, in northwest corner of bridge; spike marked "U. S. 174 B. M."	174.91
T. 4 S., R. 11 E., northwest corner sec. 2, 0.9 mile east of Hickman, at T in roads, southeast corner of intersection, 75 feet east of north-south fence; spike in telephone pole marked "U. S. 169 B. M."	169.28
Hickman, 0.4 mile east of, on north boundary near quarter corner of sec. 3, T. 4 S., R. 11 E., southeast corner of concrete highway bridge crossing Turlock irrigation ditch; aluminum tablet stamped "179 1913"	179.078

From point 6 miles southeast of Oakdale east along highway to point 3 miles northwest of La Grange

	Feet
T. 2 S., R. 11 E., northeast corner of sec. 28, southeast corner of crossroads; spike in fence post marked "U. S. 262 B. M."	262.28
T. 2 S., R. 11 E., northeast corner sec. 27, south side of road; spike in fence post marked "U. S. 252 B. M."	252.22
T. 2 S., R. 11 E., southeast corner sec. 23, 33 feet west of north-south fence on section line, north side of road; iron post stamped "237 1913"	237.417
Sierra Ry. crossing on east-west road; top of rail	200.3
T. 2 S., R. 11 E., near quarter corner between secs. 24 and 25, 585 feet east of Sierra Ry. crossing with east-west road, east end of bridge, north side of road; top of concrete foundation; chiseled square marked "U. S. 195 B. M."	194.93
T. 2 S., R. 12 E., corner of secs. 19, 20, 29, and 30; top of concrete monument with copper bolt marking section corner	244.31
T. 2 S., R. 12 E., near quarter corner between secs. 29 and 30, 0.5 mile east by 1 mile north of Paulsell, at fork in road, southeast corner of intersection; iron post stamped "232 1913"	232.221
Paulsell, 1 mile north by 2 miles east of, near center of sec. 28, T. 2 S., R. 12 E., 250 feet east of north-south fence, north side of road, at angle in fence; spike in fence post, marked "U. S. 259 B. M."	258.93
T. 2 S., R. 12 E., near quarter corner between secs. 27 and 28, south side of road; spike in fence post, marked "U. S. 220 B. M."	219.95
T. 2 S., R. 12 E., NE. ¼ sec. 27, 2 miles west of Warnersville, at point where east-west road leaves quarter-section line turning north-east, north side of road; iron post stamped "291 1913"	291.112
Warnersville, 1.6 miles west of, near point where highway joins Sierra Ry. from the northwest, at railroad crossing over dry creek, in top of west concrete foundation, north side of track; aluminum tablet stamped "225 1913"	225.517
Warnersville, 0.5 mile west of, near east end of first trestle west of, in top of north end of cap of bent; spike, marked "U. S. 220 B. M."	220.58
Warnersville, intersection of north-south road with Sierra Ry. southwest corner of intersection, 120 feet east of milepost 16, E. ½ sec. 25, T. 2. S., R. 12 E.; iron post stamped "224 1913"	224.569
Warnersville, 1.2 miles east of, 0.2 mile east of milepost 17, highway crossing with Sierra Ry.; top of rail	240.4
Warnersville, 1.5 miles east of, 1.6 miles west of Cooperstown, at steel highway bridge, south side of Sierra Ry., northwest corner of bridge, on top of concrete abutment; chiseled square, marked "U. S. 233 B. M."	233.65
Cooperstown, 1.2 miles west of, 0.3 mile east of steel bridge over dry creek, highway crossing on Sierra Ry.; top of rail	246.1
Cooperstown, 150 feet west by 135 feet north of Sierra Ry. station, SE. ¼ sec. 21, T. 2 S., R. 13 E., 150 feet east of milepost 19, 50 feet west of and in line with front of F. W. Marston's store; iron post stamped "270 1913"	270.633
Cooperstown, in front of station; top of rail	269.9
Cooperstown, 0.5 mile south of, 0.5 mile south of Sierra Ry. crossing, east edge of county road, on summit of hill, in base of oak tree used by telephone line; spike, marked "U. S. 323 B. M."	323.56

	Feet
Cooperstown, 0.8 mile southeast of, in county road, northeast corner of T road intersection; spike in fence post, marked "U. S. 307 B. M."	307.74
Cooperstown, 2.2 miles southeast of, near edge of timber, at angle in road, east side of road; spike in brace of telephone pole, marked "U. S. 300 B. M."	300.61
Cooperstown, 2.5 miles southeast of, near quarter corner between secs. 34 and 35, T. 2 S., R. 13 E., 150 feet south of Rydberg Creek, 250 feet north of fork in road, in northwest corner of outcrop of conglomerate rock; aluminum tablet stamped "289 1913"	289.631

COPPEROPOLIS QUADRANGLE

[Latitude 37° 45′–38°; longitude 120° 30′–120° 45′]

CALAVERAS, STANISLAUS, AND TUOLUMNE COUNTIES

Primary leveling in 1896 by J. B. Lippincott

From Copperopolis southeast to Mount Diablo base line

	Feet
Copperopolis, in front of brick wall of Fontana's store, approximately 2 feet above the store floor and 3 feet above stone foundation, opposite Vendome Hotel; bronze tablet stamped "971"	971.659
O'Byrnes Ferry, Stanislaus River, 500 feet north of bridge, on west side of Milton-Jamestown road, in the stone front wall of Pardee's store, between south window and southeast corner of store; bronze tablet stamped "432"	432.461
O'Byrnes Ferry, 3 miles east of, at the top of and on the north side of grade, about 3 miles west of the Goodwin ranch; iron post stamped "1090"	1,090.906

Primary leveling by D. S. Birkett in 1915

From center of sec. 15, T. 1 N., R. 11 E., along highway east and northeast to Copperopolis

Telegraph City, 0.4 mile west of, at top of hill, on north side of road, at base of fence post marked "600"; ground	600.8
Telegraph City, 200 feet west of ranch house, at gate to barnyard on south side of road, in west gatepost; railroad spike scribed "U. S. B. M. 612"	612.47
Telegraph City, 0.5 mile east of, at road into wooded pasture to south, at gate marked "729"; ground	729.8
Telegraph City, 0.75 mile east of, at sharp curve, 20 feet north of road, on top of large boulder; point marked "U. S. B. M. 826"	826.41
Telegraph City, 1.75 miles east of, 1.1 miles west of summit on county road, 150 feet east of conspicuous boulder overgrown by tree, on south side of road, in oak tree; railroad spike scribed "U. S. B. M. 1028"	1,028.37
T. 1 N., R. 12 E., in sec. 7, at summit of county road between Copperopolis and Telegraph City, 35 feet south of road; iron post stamped "1177 1915"	1,177.016
Copperopolis, 4 miles southwest of, 0.65 mile east of summit of county road between Copperopolis and Telegraph City, 10 feet north of road, on solid rock; point marked "U. S. B. M. 965"	965.28
Copperopolis, 3.6 miles southwest of, about 1 mile east of road summit; surface of water at small creek crossing April 30, 1915	845.0

	Feet
Copperopolis, 3.1 miles southwest of, 1.5 miles northeast of summit of county road between Copperopolis and Telegraph City, 0.45 mile east of small creek, 20 feet south of road at corner of fence, in fence post; railroad spike, marked "U. S. B. M. 908"	908.04
Copperopolis, 2.2 miles southwest of, 1.1 miles southwest of fork in roads leading to Hodson and to Telegraph City, 275 feet east of small creek crossing the Telegraph City road, 25 feet south of road, in pine tree, scribed "U. S. B. M. 819"; railroad spike	819.58
Copperopolis, 1.1 miles southwest of, 220 feet west of fork in roads leading to Telegraph City and to Hodson, 30 feet south of former and 125 feet south of latter road, at fence corner; iron post stamped "907 1915"	907.723
Copperopolis, in front of brick wall of Fontana's store, approximately 2 feet above the store floor and 3 feet above stone foundation, opposite Vendome Hotel; bronze tablet stamped "971" (Bull. 342, p. 121) (Lippincott's b. m.)	971.659

ARENA, CRESSEY, AND WINTON QUADRANGLES

[Latitude 37° 15′–37° 30′; longitude 120° 30′–120° 45′]

MERCED COUNTY

Primary leveling by D. S. Birkett in 1912

From point 5 miles east of Turlock east along highway to Hopeton

	Feet
Turlock, 5 miles east of, 0.5 mile east of crossing of Santa Fe Ry. and Turlock-Snelling highway, east end of concrete guard rail on north side of concrete bridge over irrigation ditch, on top; chiseled square, marked "U. S. 162 B. M."	161.16
NOTE.—There is some doubt regarding this elevation, and levelman gives for this bench mark a value 1.521 feet greater, the elevation of a height of instrument.	
T. 5 S., R. 11 E., NE. ¼ sec. 23, 6.8 miles east of Turlock, 1,000 feet west of wooden bridge over irrigation ditch on north-south road, probably on section line, 85 feet south of east-west road, in top of north end of concrete culvert under irrigation ditch; aluminum tablet stamped "154 1912"	154.544
T. 5 S., R. 11 E., northeast corner sec. 23, at intersection of north-south road and Turlock-Snelling road, on floor of wooden bridge over irrigation ditch; marked "154"	154.48
T. 5 S., R. 12 E., SW. ¼ sec. 17, near O. M. Hughson's ranch house, north side of road, southeast corner of fence; spike in fence post, marked "U. S. 168 B. M."	168.10
T. 5 S., R. 12 E., northwest corner sec. 21, 1.5 miles west by 1.2 miles north of Ryer station, south side of road at T road; spike in fence post, marked "U. S. 185 B. M."	185.69
T. 5 S., R. 12 E., about the middle of north edge of sec. 21, at intersection of Turlock-Snelling road with road parallel to Southern Pacific R. R., 50 feet east of railroad, south side of Snelling road; iron post stamped "182 1912"	182.487
T. 5 S., R. 12 E., southwest corner of sec. 15, 300 feet east of north-south section line, in front of Barfield School, north side of road; spike in fence post, marked "U. S. 195 B. M."	195.41

	Feet
T. 5 S., R. 12 E., southwest corner sec. 14, 11.8 miles east of Turlock, at intersection of roads, northeast corner of intersection; iron post stamped "219 1912"	219.772
Ryer, 0.5 mile north by 0.8 mile east of, northwest corner of sec. 26, southeast corner of intersection of roads; spike in base of telephone pole, marked "U. S. 207 B. M."	206.97
T. 5 S., R. 12 E., intersection of Turlock-Snelling road with section line between secs. 25 and 26, 75 feet east of section line, south side of road; spike in base of telephone pole marked "U. S. 191 B. M."	191.54
Hopeton, 4.4 miles west of, near Dry Gulch bridge, 200 feet east of center of creek bed, south side of road; spike in gatepost marked "U. S. 148 B. M."	148.41
T. 5 S., R. 13 E., 0.5 mile west of southeast corner sec. 19, 3.3 miles west of Hopeton, at intersection of fenced lane with highway, south side of road; spike in gatepost marked "U. S. 212 B. M."	212.55
T. 5 S., R. 13 E., SW. ¼ sec. 20, 2.6 miles west of Hopeton, on top of hill opposite barn on the Floss Inglsbe place, south side of road; spike in fence post marked "U. S. 230 B. M."	230.81
T. 5 S., R. 13 E., south edge of sec. 17, 1.6 miles west of Hopeton, 100 feet west of bridge over slough, 50 feet north of road; iron post stamped "166 1912"	166.713
Hopeton, 0.5 mile west of, northeast corner sec. 21, T. 5 S., R. 13 E., southwest corner of intersection of roads; spike in deadman marked "U. S. 177 B. M."	177.66

From Arena west along highway 4.5 miles

Arena, 1.4 miles west by 0.3 mile south of, northeast corner of Hartley ranch, 30 feet west of north-south fence; spike in large gatepost marked "U. S. 131 B. M."	131.30
T. 6 S., R. 11 E., near quarter corner between secs. 35 and 36, 1.5 miles south of Livingston, southwest corner of crossroads; iron post stamped "120 1913"	120.503
Livingston, 1.5 miles south by 1 mile west of, near quarter corner between secs. 26 and 27, T. 6 S., R. 11 E.; spike in fence post marked "U. S. 123 B. M."	123.00

DELTA RANCH, SANDYMUSH, SANTA RITA BRIDGE, AND TURNER RANCH QUADRANGLES

[Latitude 37°–37° 15′; longitude 120° 30′–120° 45′]

MERCED AND MADERA COUNTIES

Primary leveling by D. S. Birkett in 1913

From southwest corner of sec. 13, T. 8 S., R. 13 E., along highway west 2 miles, thence north 1 mile, thence west to southwest corner of sec. 14, T. 8 S., R. 11 E.

	Feet
T. 8 S., R. 13 E., near corner of secs. 14, 15, 22, and 23, 5 miles south by 2 miles west of Merced; spike in base of electric-power pole marked "U. S. 138 B. M."	138.62
T. 8 S., R. 13 E., southwest corner sec. 15, 6 miles south by 3 miles west of Merced, 33 feet north by 33 feet east of intersection of fences; iron post stamped "133 1913"	133.124

	Feet
T. 8 S., R. 13 E., near southeast corner sec. 9, 4 miles south by 3 miles west of Merced, 1 mile south of schoolhouse, at angle in road, north side of road; spike in gatepost marked "U. S. 135 B. M."	135.71
T. 8 S., R. 13 E., near southwest corner sec. 9, 4 miles south by 4 miles west of Merced, northeast corner of intersection of road; spike in fence post marked "U. S. 128 B. M."	128.37
T. 8 S., R. 13 E., 0.1 mile north of southwest corner sec. 8, 4 miles south by 5 miles west of Merced; nail in hub, marked by mound of cowslips and guard stakes, marked "U. S. 121 B. B."	121.31
T. 8 S., R. 12 E., northwest corner sec. 13, 4 miles south by 7 miles west of Merced, at angle in road, southeast corner of intersection; iron post stamped "113 1913"	113.085
T. 8 S., R. 12 E., northeast corner sec. 15, 4 miles south by 8 miles west of Merced, south side of road, 20 feet west of fence running south; spike in fence post marked "U. S. 107 B. M."	107.84
Merced, 4 miles south by 8.8 miles west of, 0.2 mile east of southwest corner of sec. 10, T. 8 S., R. 12 E., near house in grove of trees near J. J. Saunder's place, south side of road, top of north side of concrete watering tank; aluminum tablet stamped "112 1913"	112.734
T. 8 S., R. 12 E., northwest corner sec. 16, 4 miles south by 10 miles west of Merced, at angle in road, south side of road; spike in fence post marked "U. S. 102 B. M."	101.88
T. 8 S., R. 12 E., southwest corner sec. 8, 0.4 mile southeast of, 4.4 miles south by 11 miles west of Merced, north side of road at cattle pen; spike in fence post marked "U. S. 97 B. M."	97.33
T. 8 S., R. 12 E., 66 feet north by 33 feet east of southwest corner sec. 18, 5 miles south by 12 miles west of Merced, at angle in road, east side of road; iron post stamped "93 1913"	92.910
T. 8 S., R. 11 E., 0.2 mile west of southwest corner sec. 13, 5 miles south by 13.2 miles west of Merced, northeast corner of wooden bridge crossing dry creek bed; spike marked "U. S. 90 B. M."	90.39
T. 8 S., R. 11 E., 0.4 mile west of southwest corner sec. 14, 5 miles south by 14.4 miles west of Merced, southwest corner of wooden bridge; spike marked "U. S. 87 B. M."	87.60

From point 5 miles east of Los Banos east along highway to Santa Rita ranch, thence northeast to sec. 3, T. 10 S., R. 113 E.

Los Banos, 0.3 mile south by 5.7 miles east of, 30 feet west of north-south fence, 70 feet west of electric-power pole 746, on fence line; iron post stamped "99 1913"	98.972
Los Banos, 0.3 mile south by 6.7 miles east of, north side of road; spike in base of electric-power pole 730, marked "U. S. 100 B. M."	99.87
T. 10 S., R. 12 E., 0.2 mile west of southeast corner sec. 18, at offset in road and electric-power line, north side of road; spike in base of electric-power pole 710, marked "U. S. 104 B. M."	104.45
Los Banos, 0.3 mile south by 9.8 miles east of, opposite Weir Camp of Miller & Lux, southeast corner of T road south; iron post stamped "106 1913"	106.380

	Feet
Los Banos, 0.3 mile south by 10.8 miles east of, 2.8 miles west of Santa Rita ranch, 500 feet west of wooden bridge over slough across road, north side of road; spike in base of electric-power pole 671, marked "U. S. 107 B. M."	107.07
Los Banos, 0.3 mile south by 11.7 miles east of, 1.9 miles west of Santa Rita ranch, at T in road and electric-power line, north side of road; spike in base of electric-power pole 655, marked "U. S. 109 B. M."	108.92
Los Banos, 0.3 mile south by 12.8 miles east of, 0.8 mile west of Santa Rita ranch, 100 feet east of T road south, north side of road; spike in electric-power pole, marked "U. S. 110 B. M."	110.59
Los Banos, 0.3 mile south by 13.6 miles east of, northwest corner of barnyard of Santa Rita ranch; iron post stamped "116 1913"	116.515
Los Banos, 0.5 mile south by 14.2 miles east of, 0.6 mile southeast of Santa Rita ranch, southwest corner of wooden bridge over Santa Rita Slough; spike marked "U. S. 118 B. M."	118.33
Los Banos, 0.4 mile south by 15.1 miles east of, 2.5 miles east of Santa Rita ranch, near north-south fence, southwest corner of small bridge over irrigation ditch; spike marked "U. S. 114 B. M."	114.31
Los Banos, 0.3 mile south by 16.7 miles east of, 3.1 miles east of Santa Rita ranch, southwest corner of steel drawbridge over San Joaquin River, in top of concrete pier; aluminum tablet stamped "124 1913"	124.646
Chowchilla, 4 miles south by 15.5 miles west of, 3 miles west by 2.1 miles south of Chowchilla ranch house, 100 feet west of angle in road; spike in northeast corner of wooden bridge, marked "U. S. 120 B. M."	120.45
T. 10 S., R. 13 E., southeast corner sec. 10, 3.7 miles south by 15 miles west of Chowchilla, 1.9 miles south by 2.5 miles west of Chowchilla ranch house, at angle in road, north side of road, 20 feet west of fence corner; spike in fence post, marked "U. S. 120 B. M."	120.63
T. 10 S., R. 13 E., southeast corner sec. 3, 2.7 miles south by 15 miles west of Chowchilla, 0.9 mile south by 2.5 miles west of Chowchilla ranch house, northwest corner of angle in road; iron post stamped "123 1913"	123.411

GUSTINE, MITCHELL SCHOOL, STEVINSON, AND TURLOCK QUADRANGLES

[Latitude 37° 15′–37° 30′; longitude 120° 45′–121°]

MERCED AND STANISLAUS COUNTIES

Primary leveling by W. H. Monahan in 1909 and by D. S. Birkett in 1912

From sec. 17, T. 5 S., R. 9 E., east along highway to Turlock

	Feet
T. 5 S., R. 9 E., northeast corner sec. 20, 8.5 miles west of Turlock, at intersection with Crows Landing road, northeast corner of schoolhouse yard; iron post stamped "60 1912"	61.007
T. 5 S., R. 9 E., southeast corner sec. 16, north side of road; in top of concrete siphon; aluminum tablet stamped "66 1912"	66.400
T. 5 S., R. 9 E., northeast corner sec. 22, southwest corner of intersection of roads; spike in base of fence post, marked "U. S. 70 B. M."	70.71

	Feet
T. 5 S., R. 9 E., northwest corner sec. 24, southeast corner of intersection of roads; iron post stamped "75 1912"	75.120
Turlock, 4.5 miles west of, near Presbyterian Church, 10 feet east of irrigation lateral, north side of road; spike in base of telephone pole, marked "U. S. 83 B. M."	83.14
Turlock, 3.5 miles west of, southwest corner of Washington School yard, 30 feet east of irrigation ditch, north side of road; iron post stamped "85 1912"	86.034
Turlock, 2.5 miles west of, 1 mile east of Washington School, at southeast corner of T road; spike in telephone pole, marked "U. S. 91 B. M."	91.19
Turlock, 1.5 miles west of, near cemetery, southwest corner of T road; spike in telephone pole, marked "U. S. 95 B. M."	95.72
Turlock, 1,000 feet east of west edge of city limit, in 600 block, south side of cemetery road, northeast corner of concrete siphon; chiseled square on top	100.67

From Turlock east along highway 5 miles

Turlock, 0.8 mile east of, southwest corner sec. 13, T. 5 S., R. 11 E., in front of J. G. Lindblum's house, north side of road; spike in base of telephone pole, marked "U. S. 108 B. M."	108.11
T. 5 S., R. 11 E., northwest corner sec. 19, 1.8 miles east of Turlock, opposite Smith's house, south side of road, 33 feet east of fence corner; iron post stamped "112 1912"	112.470
T. 5 S., R. 11 E., southwest corner sec. 17, 2.8 miles east of Turlock, 80 feet east of north-south section line, north side of road; spike in telephone pole, marked "U. S. 116 B. M."	116.09
T. 5 S., R. 11 E., northwest corner sec. 21, 3.8 miles east of Turlock, near Underhill ranch, south side of road; spike in base of large gatepost, marked "U. S. 125 B. M."	125.49
Turlock, 4.2 miles east of, 0.2 mile west of Santa Fe Ry. crossing with Turlock-Snelling road, concrete bridge on bounty road over big irrigation ditch, east end of concrete guard rail, in top; aluminum tablet stamped "151 1912"	151.356
Turlock, 4.4 miles east of, at crossing of Santa Fe Ry. and Turlock-Snelling road; top of rail	151.85

From point 4.5 miles west of Arena west along highway 11.4 miles, thence southwest to Newman

T. 6 S., R. 11 E., quarter corner between secs. 33 and 34, 1.5 miles south by 2 miles west of Livingston, at intersection of roads, northwest corner; spike in fence post, marked "U. S. 120 B. M."	120.52
Livingston, 1.5 miles south by 3 miles west of, at quarter corner between secs. 32 and 33, T. 6 S., R. 11 E., 30 feet north by 30 feet east of present fence; iron post stamped "114 1913"	114.701
Livingston, 1.5 miles south by 4 miles west of, near quarter corner between secs. 31 and 32, T. 6 S., R. 11 E., at northwest corner of T road; spike in fence post, marked "U. S. 109 B. M."	109.40
T. 6 S., R. 10 E., near east quarter corner of sec. 36, 1.5 miles west of Livingston; spike in post, marked "U. S. 105 B. M."	105.83

	Feet
T. 6 S., R. 10 E., 450 feet north of quarter corner between secs. 35 and 36, 1.4 miles south by 6 miles west of Livingston, at southwest corner of T road, 0.2 mile east of Merced River bridge; iron post stamped "98 1913"	97.944
Merced River bridge, 0.4 mile northwest of, and third wooden bridge from east end south side; spike in side, marked "U. S. 90 B. M."	90.65
T. 6 S., R. 10 E., 0.2 mile south of, northeast corner of section 34, at T road leading due north to Turlock, south side of road; spike in telephone pole, marked "U. S. 92 B. M."	92.03
T. 6 S., R. 10 E., 0.2 mile south of northeast corner of sec. 33, at intersection of roads, southwest corner; spike in fence post, marked "U. S. 86 B. M."	85.82
T. 6 S., R. 10 E., 0.2 mile south of northeast corner of sec. 32, 1.2 miles south by 9 miles west of Livingston, 25 feet west of southwest corner of intersection of roads, on fence line; iron post stamped "83 1913"	82.849
T. 6 S., R. 10 E., 0.2 mile south of northwest corner of sec. 32, northeast corner of T road; spike in fence post, marked "U. S. 79 B. M."	78.18
T. 6 S., R. 10 E., 0.2 mile south of northwest corner sec. 31, at right angle in road, north side of road; spike in fence post, marked "U. S. 73 B. M."	73.45
T. 6 S., R. 9 E., southeast corner sec. 26, 1 mile south by 12 miles west of Livingston, west side of road at T road; iron post stamped "69 1913"	69.593
T. 6 S., R. 9 E., 0.2 mile east of point where Livingston-Newman highway turns south to Newman in northwest quarter of sec. 35, southeast corner of concrete bridge over irrigation ditch; chiseled square, marked "U. S. 67 B. M."	67.03
T. 6 S., R. 9 E., in southwest quarter of sec. 35, 0.6 mile south of point where Livingston-Newman highway turns south to Newman; square on southeast corner of concrete bridge	70.79
T. 7 S., R. 9 E., SE. ¼ sec. 3, 4.3 miles northeast of Newman, west end south side of steel bridge crossing Merced River, in top of concrete abutment; aluminum tablet stamped "72 1913"	72.577
Newman, 3.4 miles northeast of, 0.2 mile southwest of steel drawbridge crossing San Joaquin River, at fork in road; spike in conspicuous signboard, marked "U. S. 65 B. M."	65.53
Newman, 2.5 miles northeast of, on Livingston-Newman highway, east side of road, 500 feet northeast of lone oak tree; spike in base of telephone pole, marked "U. S. 69 B. M."	69.12
T. 7 S., R. 9 E., northwest quarter corner sec. 16, 2 miles northeast of Newman, at fork in road, northwest corner of intersection; iron post stamped "70 1913"	70.371
Newman, 0.5 mile east of, at fork in road, southeast corner of intersection; spike in telephone pole, marked "U. S. 80 B. M."	80.66
Near Gustine	
Gustine, in front of station; top of rail	99.9
Gustine, 0.4 mile northwest of, 5 feet north of milepost 124, 25 feet west of railroad track; spike in fence post, aluminum tag stamped "95"	95.23

HOPETON QUADRANGLE

[Latitude 37° 22′ 30″–37° 30′; longitude 120° 22′ 30″–120° 30′]

MERCED COUNTY

Primary leveling by C. H. Semper in 1905

From Snelling west to Hopeton, thence south to Amsterdam

	Feet
Snelling, 4.5 miles southwest of, at corner of fork with road to north, at fence corner of J. G. Ruddle's ranch; iron post stamped "204 B"	204.477
Hopeton, at southeast corner of fork with private road, in front of store; iron post stamped "185 B"	185.426
Hopeton, 2.2 miles south of, southwest end of bridge over Merced River, west margin of road; iron post stamped "172 B" (destroyed)	172.245
Amsterdam, 140 feet west of large warehouse, 10 feet east of station signboard, 20 feet north of track; iron post stamped "215 B"	215.596

INGOMAR, LOS BANOS, SAN LUIS RANCH, AND VOLTA QUADRANGLES

[Latitude 37°–37° 15′; longitude 120° 45′–121°]

MERCED COUNTY

Primary leveling by W. H. Monahan in 1909 and D. S. Birkett in 1913

From Dunwoodie ranch north along highway to Los Banos, thence northwest along Southern Pacific R. R. to Gustine

	Feet
Dunwoodie ranch, 100 feet north of iron gate leading to dwelling, 10 feet north of road, near fence line; iron post stamped "135 G 1909 Cal"	135.113
Dunwoodie ranch, 1.4 miles north of, at corner of driveway to ranch house painted brown with red roof; spike in fence post, aluminum tag stamped "120"	128.96
Dunwoodie ranch, 2.4 miles northwest of, 10 feet south of wagon road, 400 feet west of junction of road; spike in fence post, aluminum tag stamped "120"	120.18
Los Banos, north edge of town, 75 feet west of railroad, opposite creamery, 25 feet south of canal, on west side of public highway; iron post stamped "117 G 1909 Cal"	116.813
Los Banos, 1.1 miles north of, 50 feet west of railroad and culvert 1391; spike in telegraph pole, aluminum tag stamped "116"	116.19
Los Banos, 1.8 miles north of, on west side of railroad track; spike in telegraph milepost 139, aluminum tag stamped "116"	115.80
Los Banos, 2.8 miles north of, on east side of railroad, on fence line between highway and railroad, 150 feet east of milepost 138; iron post stamped "114 G 1909 Cal"	114.026
Los Banos, 3.8 miles north of, on west side of railroad; spike in telegraph milepost 137, aluminum tag stamped "105"	104.91
Volta, in front of station; top of rail	103.8
Volta, 1.2 miles north of, 25 feet west of railroad; spike in telegraph milepost 135, aluminum tag stamped "100"	99.46
Volta, 2.2 miles north of, 25 feet west of railroad track; spike in telegraph milepost 134, aluminum tag stamped "100"	99.79

	Feet
Volta, 3.2 miles north of, 25 feet west of railroad track; spike in telegraph milepost 133, aluminum tag stamped "102"	102.00
Volta, 4.2 miles north of, at base of telegraph milepost 132, 25 feet west of railroad; iron post stamped "93 G 1909 Cal"	92.327
Volta, 5.2 miles north of, 25 feet west of railroad; spike in telegraph milepost 131, aluminum tag stamped "86"	85.39
Ingomar, in front of station; top of rail	88.2
Ingomar, 0.2 mile northwest of, at base of telegraph milepost 130, 25 feet west of railroad track; iron post stamped "91 G 1909 Cal"	90.416
Ingomar, 1.2 miles northwest of, 25 feet west of railroad track; spike in telegraph milepost 129, aluminum tag stamped "93"	92.29
Ingomar, 2.2 miles northwest of, 25 feet west of railroad track, 25 feet east of Standard Oil Camp station; spike in telegraph milepost 128, aluminum tag stamped "91"	90.33
Ingomar, 3.2 miles northwest of, 25 feet west of railroad track; spike in telegraph milepost 127, aluminum tag stamped "93"	93.15
Ingomar, 4.2 miles northwest of, at base of telegraph milepost 126, 25 feet west of railroad; iron post stamped "96 G 1909 Cal"	95.979
Ingomar, 5.2 miles northwest of, 25 feet west of railroad; spike in telegraph milepost 125, aluminum tag stamped "97"	96.95

From southeast corner of sec. 16, T. 8 S., R. 11 E., southwest along highway to Los Banos, thence east 5 miles

T. 8 S., R. 11 E., southeast corner of sec. 16, 5 miles south by 1.5 miles west of Merced, north side of road; iron post stamped "87 1913"	87.340
T. 8 S., R. 11 E., near southwest corner of sec. 16, west side of road, 50 feet south of east-west fence; spike in fence post, marked "U. S. 84 B. M."	84.73
Los Banos, 12.5 miles northeast of, near San Joaquin bridge, in front of old road house, southwest corner of water trough, in top of circle of paint; nail, marked "U. S. 86 B. M."	86.84
San Joaquin bridge, 1.2 miles southwest of, 10 miles north by 3 miles east of Los Banos, almost east of Underwood ranch barn, east side of road; iron post stamped "84 1913"	84.333
San Joaquin bridge, 2.1 miles southeast of, 9 miles north by 2.7 miles east of Los Banos, southeast corner of wooden bridge over slough; spike, marked "U. S. 83 B. M."	83.60
San Joaquin bridge, 2.8 miles southeast of, 8 miles north by 2.5 miles east of Los Banos, southwest corner of wooden bridge over timbered dry creek; spike, marked "U. S. 83 B. M."	83.49
San Luis camp, 0.8 mile northeast of, 7 miles north by 1.8 miles east of Los Banos, 100 feet north of wooden bridge over dry creek; spike in fence post, marked "U. S. 85 B. M."	85.13
San Luis camp, 6.5 miles north by 1.6 miles east of Los Banos, 100 feet southeast of cookhouse, top of concrete tank, at southeast corner; aluminum tablet, stamped "89 1913"	89.642
San Luis camp, 1 mile southwest of, on road to Los Banos, 50 feet northwest of bridge over irrigation ditch; spike in telephone pole, marked "U. S. 91 B. M."	91.04

	Feet
San Luis camp, 2.1 miles southwest of, 5 miles north by 0.5 mile east of Los Banos, near quarter corner between secs. 23 and 24, T. 9 S., R. 10 E., 1.8 miles north of Standard Oil Co.'s Los Banos plant, at angle in road and telephone line, east side of road; iron post, stamped "88 1913"	88.429
T. 9 S., R. 10 E., near quarter corner between secs. 25 and 26, 4 miles north by 0.5 mile east of Los Banos, east side of road; spike in telephone pole, marked "U. S. 90 B. M."	90.65
Los Banos, 2.5 miles north by 0.5 mile east of, northwest corner of grounds of Standard Oil Co.'s Los Banos plant, southeast corner of intersection of road; iron post, stamped "95 1913"	94.979
Standard Oil Co.'s Los Banos plant, 1.7 miles south of, 50 feet north of fence with gate across road, east side of road; spike in telephone pole, marked "U. S 105 B. M."	105.40
Los Banos, 0.3 mile north by 0.5 mile west of, southwest corner of race-track grounds, southwest corner of T road west; spike in fence post, marked "U. S. 109 B. M."	109.16
Los Banos, 0.3 mile north of, southwest corner of intersection of Fifth St. and first east-west road north of city limits; spike in fence post, marked "U. S. 112 B. M."	112.04
Los Banos, north edge of town, 75 feet west of railroad, opposite creamery, 25 feet south of canal, on west side of road; iron post, stamped "117 Cal 1909 G"	116.813
Los Banos, in front of Southern Pacific R. R. station; top of rail	115.2
Los Banos, northeast concrete pier of city water tower, in top; aluminum tablet, stamped "118 1913"	118.241
Los Banos, south edge of town, 100 feet east of intersection of Seventh St. and Santa Rita road, south side of road; spike in telephone pole, marked "U. S. 117 B. M."	116.86
Crossing of Santa Rita road and Southern Pacific R. R., midway between cattle guards 141 B and 141 C; top of rail	117.61
T. 10 S., R. 11 E., northwest corner sec. 19, 0.3 mile south by 1.5 miles east of Los Banos, at southeast corner of T road south; spike in telephone pole, marked "U. S. 107 B. M."	107.58
T. 10 S., R. 11 E., southwest corner sec. 17, 0.3 mile south by 2.5 miles east of Los Banos, 40 feet east of north-south fence, 0.1 mile east of cattle-dipping corral, north side of road, 3 feet east of electric-power pole 796; iron post, stamped "103 1913"	103.621
Los Banos, 0.3 mile south by 3 miles east of, northeast corner of crossing of Santa Rita road and Santa Fe Ry. grade, in base of electric-power pole 786; spike, marked "U. S. 101 B. M."	101.55
From Salt Slough west along highway to point 4.2 miles northwest of Ingomar	
Underwood ranch, 1 mile northeast of, on west bank of Salt Slough, 100 feet south of crossing, most southerly of group of large willow stumps; spike in top, marked "U. S. 78 B. M."	78.09
T. 8 S., R. 10 E., SE. ¼ sec. 35, southeast corner of fence around Underwood camp on ranch; iron post, stamped "82 1913"	82.010
T. 8 S., R. 10 E., SE. ¼ sec. 16, southwest corner of fence around barn on Fremont ranch, 1.5 miles south of Salt Slough warehouse; iron post, stamped "77 1913"	77.781

	Feet
Fremont camp, 1.2 miles west of, on road from Miller & Lux's Fremont camp to Gustine Gun Club quarters, 800 feet east of small wooden bridge over slough extending north and south, 20 feet north of road; nail in top of hub marked by guard stake, marked "U. S. 75 B. M."	75.72
Fremont camp, 2.1 miles west of, on road from Fremont camp to Gustine Gun Club, east side of road, spike in post of gate in fence northwest-southeast; marked "U. S. 75 B. M."	75.40
T. 8 S., R. 10 E., near west line of sec. 18, 1.5 miles northeast of Gustine Gun Club, on private road leading to Salt Slough warehouse, south of road; spike in tie gatepost, marked "U. S. 75 B. M."	74.57
T. 8 S., R. 9 E., SE. ¼ sec. 14, at Gustine Gun Club quarters, southeast corner of fence around buildings; iron post, stamped "76 1913"	76.334
T. 8 S., R. 9 E., southeast corner sec. 15, at angle in road, 1.5 miles east of highway crossing with Southern Pacific R. R., north side of road; spike in telephone pole, marked "U. S. 76 B. M."	76.34
T. 8 S., R. 9 E., southeast corner sec. 16, at T in road leading south, north side of road; spike in telephone pole, marked "85 B. M. U. S."	84.96
Crossing of Southern Pacific R. R. and road leading east to Gustine Gun Club, between cattle guards 125 B and 125 C; top of rail	100.2

From point 5 miles east of Los Banos east along highway to Santa Rita ranch, thence northeast to sec. 3, T. 10 S., R. 13 E.

Los Banos, 0.3 mile south by 4.7 miles east of, 100 feet west of north-south fence, north side of road, in base of electric-power pole 761; spike, marked "U. S. 98 B. M."	98.41

Primary leveling by W. H. Monahan in 1908

From Snelling west to Hopeton, thence south to Amsterdam

Snelling, 4.5 miles southwest of, at corner of fork with road to north, at fence corner of J. G. Ruddle's ranch; iron post, stamped "204 B"	204.477
Hopeton, at southeast corner of fork with private road, in front of saloon; iron post, stamped "185 B"	185.456
Hopeton, 2.2 miles south of, southwest end of bridge over Merced River, west margin of road: iron post, stamped "172 B"	172.715
Amsterdam, 140 feet west of large warehouse, 10 feet east of station signboard, 20 feet north of track; iron post, stamped "215 B"	215.626

From point about 8 miles southwest of Los Banos along highways to Los Banos, thence northwest along Southern Pacific R. R. via Volta and Ingomar to point about 1.4 miles north of Gustine

Charleston School, northeast corner of school yard, at junction of wagon road and canal; iron post, stamped "149 G 1909"	149.120
Dinwoodie ranch, 100 feet north of iron gate leading to dwelling and 10 feet north of road, near fence line; iron post, stamped "135 Cal 1909 G"	135.157
Los Banos, north edge of town, 75 feet west of railroad, opposite creamery, 25 feet south of canal, on west side of road; iron post, stamped "117 Cal 1909 G"	116.883

	Feet
Los Banos, 2.8 miles north of, east of railroad, on fence line between road and railroad, 150 feet east of milepost 138; iron post, stamped "114 Cal 1909 G"	114.096
Volta, in front of station; top of rail, marked "104"	103.9
Volta, north end of town, 500 feet northeast of schoolhouse and 25 feet west of track, at base of telegraph milepost 136; iron post, stamped "102 Cal 1909 G" (destroyed)	101.850
Volta, 4.2 miles north of, 25 feet west of railroad, at base of telegraph milepost 132; iron post, stamped "93 Cal 1909 G"	92.397
Ingomar, 0.2 mile north of, at base of telegraph milepost 130, 25 feet west of railroad; iron post, stamped "91 Cal 1909 G"	90.486
Ingomar, 4.2 miles north of, at foot of telegraph milepost 126, 25 feet west of railroad; iron post, stamped "96 Cal 1909 G"	96.049
Gustine, in front of station; top of rail, marked "101"	99.95
Gustine, 1.4 miles north of, 5 feet east of milepost 123, 25 feet west of railroad; iron post, stamped "94" (destroyed)	94.181

Primary leveling by Roscoe Reeves in 1916

South of Gustine

T. 8 S., R. 9 E., SE. ¼ sec. 14, at Gustine Gun Club quarters, southeast corner of fence around buildings; iron post stamped "76"	76.334
Gustine, 1.5 miles south of, east rail at railroad crossing	100.2

LA GRANGE QUADRANGLE

[Latitude 37° 37′ 30″–37° 45′; longitude 120° 22′ 30″–120° 30′]

MERCED AND STANISLAUS COUNTIES

Primary leveling by D. S. Birkett in 1913

From point 5 miles northwest of La Grange southeast to La Grange, thence southwest 4 miles

	Feet
T. 3 S., R. 13 E., near line between secs. 1 and 2, 4 miles southeast of Cooperstown, 100 feet east of Gallup House, 50 feet west of center of creek bed; spike in front of old shack, marked "U. S. 304 B. M."	304.48
T. 3 S., R. 13 E., 0.25 mile south of center of sec. 1, 2.5 miles northwest of La Grange, at Live Oak School, northeast corner of yard, west side of road; iron post stamped "380 1913"	380.810
La Grange, 1.8 miles northwest of, 1 mile southeast of Live Oak School, 50 feet east of private road leading southwest; spike in telephone pole, marked "U. S. 345 B. M."	345.12
La Grange, 1.2 miles northwest of, 400 feet southeast of summit of hill, at fork in road leading to Cooperstown, Sonora, and La Grange, southwest corner of intersection; spike in telephone pole, marked "U. S. 407 B. M."	407.03
La Grange, 0.5 mile northwest of, at highway crossing over main irrigation canal, top of concrete abutment, south end of bridge, west side of road; chiseled square, marked "U. S. 279 B. M."	279.06
La Grange, 0.2 mile northeast of, at old highway bridge over Tuolumne River, south side of river, east concrete pier; chiseled square on top, marked "U. S. 192 B. M."	192.13
La Grange, in front of post office; river-traverse bench mark, marked "255"	256.26

	Feet
La Grange, in front of L. Levacci Building, east end of top concrete step; aluminum tablet stamped "258 1913"	258.032
La Grange, 1 mile southwest of, 150 feet west of graveyard; top of pointed rock in circle of paint, marked "U. S. 207 B. M."	207.14
T. 3 S., R. 15 E., SW. ¼ sec. 25, 2.3 miles southwest of La Grange, south end of south approach to Basso Bridge (steel bridge over Tuolumne River), west side of road, in top of concrete abutment; aluminum tablet stamped "173 1913"	173.702

Primary leveling by D. S. Birkett in 1915

From La Grange along highways southeast to sec. 32, T. 3 S., R. 14 E.

La Grange, in front of L. Lavacci Building, in east end of top concrete step; aluminum tablet stamped "258 1913"	258.032
La Grange, 0.15 mile south of La Grange Hotel, in southeast corner of fork in roads, at fence post marked "300"; ground	300.6
La Grange, 0.8 mile southeast of, in northeast corner of steel bridge over Turlock Canal, in concrete abutment; bronze tablet stamped "291 1915"	291.645
La Grange, 1.3 miles south of, at top of hill, on east side of road, in fence post; railroad spike, marked "U. S. B. M. 429"	429.46
La Grange, 1.8 miles south of, on west side of road; floor of small bridge, marked "370"	370.1
La Grange, 2.25 miles south of, at point where private road to southeast passes through gate, at top of hill, at east side of road, in gatepost; railroad spike, marked "U. S. B. M. 422"	422.23
La Grange, 2.8 miles south of, on west side of small bridge; floor of bridge, marked "328"	328.2
T. 2 S., R. 14 E., in sec. 35, Mount Diablo, B. & M., Tuolumne County, at north end of Don Pedro dam; top of downstream parapet	613.524

QUADRANGLE INCLUDING DELTA RANCH, INGOMAR, LOS BANOS, SAN LUIS RANCH, SANTA RITA BRIDGE, STEVINSON, AND TURNER RANCH QUADRANGLES

[Latitude 37°–37° 30; longitude 120° 30′–121°]

MERCED AND STANISLAUS COUNTIES

Primary leveling by Corps of Engineers, U. S. Army, in 1913–14

	Feet
T. 10 S., R. 13 E., 300 feet north and 1,400 feet east of southwest corner of sec. 35, about 1 mile southeast of Temple warehouse, at base of a large willow tree which is near the center of an isolated group of willows, 300 feet south of main canal, 700 feet northwest of lateral; iron post set in concrete (U. S. C. E. b. m. 377)	125.990
T. 10 S., R. 13 E., 2,500 feet west of southeast corner of sec. 34, 50 feet west of west bank of Santa Rita Canal, 150 feet south of Poso and Santa Rita canals crossings, on inside of northeast corner of water-tank tower near feeding sheds, 2,500 feet south of Temple warehouse; iron post set in concrete (U. S. C. E. b. m. 378)	125.100
Santa Rita bridge, about 1.5 miles south of, 40 feet north of fence, 0.5 mile north of Temple warehouse, in fence line, 75 feet south of south bank of Santa Rita Slough, 225 feet west of west bank of river; iron post set in concrete (U. S. C. E. b. m. 379)	125.880

	Feet
Santa Rita bridge, 4,400 feet south of, on west side of river, 81 feet west of west river levee, 235 feet northeast of Santa Rita canal levee, about 500 feet south of sharp bend in river, about 850 feet south of junction of river and canal levees (U. S. C. E. b. m. 380)	121.830
Santa Rita bridge, in pier on north side and southwest end of draw span pier of, on main road between Los Banos and Merced; brass cap (U. S. G. S. b. m. 33)	124.726
Santa Rita bridge, 4,400 feet northwest of, about 3,500 feet southeast of Riverside ranch, 320 feet west of head gate in lateral, 45 feet south of lateral at an angle in fence where fence crosses the road; iron post set in concrete (U. S. C. E. b. m. 381)	118.43
Riverside ranch, 2,700 feet northeast of, on north side of road to ranch from river, at angle in fence, 390 feet southwest of center of bridge and head gate on main canal; iron post set in concrete (U. S. C. E. b. m. 382)	116.69
Riverside ranch, about 1.5 miles north of, about 1.25 miles east of Lucerne ranch, 60 feet east of old shed, at base of large willow tree within fence inclosure around shed; iron post set in concrete (U. S. C. E. b. m. 383)	113.96
Lucerne ranch, about 1.5 miles northeast of, 40 feet west of center of bridge and head gate on main canal, where canal makes a distinct angle toward the north; iron post set in concrete (U. S. C. E. b. m. 384)	112.65
Lucerne ranch, about 2 miles northwest of, in Keyes Grove, 400 feet northwest of approach to ford on east bank of river and directly opposite approach on west bank of river, at base of old forked and pruned willow tree; iron post set in concrete (U. S. C. E. b. m. 385)	109.88
Pick Anderson Slough, on south side of, about 2 miles south of intake of Eastside Canal, on prominent knoll, 150 feet east of slough bank and near an old tree on slough bank, at a point where Pick Anderson Slough makes a sharp bend and runs north; iron post set in concrete (U. S. C. E. b. m. 387½)	105.88
Head gate, on fence line, on north bank of river, on west side of Eastside Canal, 450 feet north of intake, 4,500 feet east of upper Turner ranch, 55 feet west of combination bridge and head gate; iron post set in concrete (U. S. C. E. b. m. 389)	100.78
Turner ranch, upper, in northeast corner of yard, about 50 feet northeast of house; iron post set in concrete (U. S. C. E. b. m. 390)	97.86
Turner ranch, upper, about 4,000 feet below, about 400 feet downstream from right angle turn, at intersecting fences, on west bank of river; iron post set in concrete (U. S. C. E. b. m. 391)	96.22
Turner ranch, lower, on east side of, in southeast corner of yard, about 15 feet southeast of cabin and about 600 feet southeast of large barn, about 250 feet northeast of river bank; iron post set in concrete (U. S. C. E. b. m. 392)	95.95
Lucerne ranch, about 3 miles northwest of, 900 feet from east (right) bank of river, about 1 mile northwest of Keyes Grove, about 700 feet northwest of river bank at point where river makes a distinct bend to left and 10 feet north of old road following down the river, 900 feet northwest of slough inlet; iron post set in concrete (U. S. C. E. b. m. 386)	106.50

	Feet
Eastside Canal, about 2 miles southeast of intake, on east side of river, 20 feet northwest of combination bridge and head gate over small slough, 30 feet east of river bank, on levee 10 feet east of old road; iron post set in concrete (U. S. C. E. b. m. 387)	103.99
Eastside Canal, about 1 mile southeast of intake, on east side of river, 5 feet north of old head gate, on east side of ditch or slough, 10 feet east of old road, 25 feet east of river bank; iron post set in concrete (U. S. C. E. b. m. 388)	102.97
Delta farm, about 2.5 miles north of, about 4,200 feet downstream from lower Turner ranch, 75 feet west of west bank of river, about 400 feet north of a point 600 feet east of west end of 4,000-foot straight reach of Miller & Lux's drainage canal, which takes out of Salt Slough at about 3,000 feet south of lower Turner ranch; iron post set in concrete (U. S. C. E. b. m. 393)	93.24
Delta farm, about 3 miles north of, at angle in fence line on west bank of river, 50 feet north of small levee at end of a dead slough which is dammed off, 1,000 feet south of three small sloughs which are dammed off, at right-angle turn in river about 1,600 feet northwest of lower end of Miller & Lux's drainage canal and on extension of its center line; iron post set in concrete (U. S. C. E. b. m. 394)	90.86
Delta farm, about 5 miles north of, west bank of river, at fence line, at lower end of nearly straight reach of river about 3,600 feet long, just above point at which river makes turn to right, at clump of willow trees, 10 feet west of stump with three large butts; iron post set in concrete (U. S. C. E. b. m. 395)	91.11
Mariposa Slough, 6,400 feet north of mouth, on west bank of river, on north bank of northerly one of two dammed-off sloughs which lead to west, at outside point of sharp turn in river to right where small lake is formed by above slough inlet; iron post set in concrete (U. S. C. E. b. m. 396)	89.02
Mariposa Slough, 1,000 feet north of mouth, east of river, at southeast corner of building; iron post set in concrete (U. S. C. E. b. m. 397)	89.70
Dickerson ferry, 150 feet north of north bank of river, about 500 feet west of north and south fence line paralleling road; iron post set in concrete (U. S. C. E. b. m. 398)	85.26
Dickerson ferry, about 1.7 miles northwest of, 40 feet northeast of northeast bank of river, about 550 feet east of slough 40 feet wide, at inlet, about 300 feet east of smaller slough inlet, at upper end of gradual bend to left; iron post set in concrete (U. S. C. E. b. m. 399)	82.30
Du Gaines ranch, 400 feet northeast of northeast river bank, 1,800 feet northwest of mouth of Bear Creek, about 50 feet east of house; iron post set in cement (U. S. C. E. b. m. 400)	78.99
Du Gaines, about 1 mile north of, east bank of river, about middle of sec. 26, T. 7 S., R. 10 E., at right-angle bend in river to left, at mouth of wide swale or slough entering river, 6 feet north of wire fence; iron post set in concrete (U. S. C. E. b. m. 401)	78.57
T. 7 S., R. 10 E., about 800 feet south and 600 feet east of northwest corner of sec. 28, at Pike ranch, 250 feet north of house and on bank of river bottom, blazed oak tree 5 feet in diameter bears N. 50° E. 30 feet; iron post set in concrete (U. S. C. E. b. m. 402)	75.37

	Feet
Salt Slough, about 700 feet above mouth, on north (right) bank of river, about 500 feet south and 1,500 feet west of northeast corner of sec. 30, T. 7 S., R. 10 E.; iron post set in concrete (U. S. C. E. b. m. 403)	69.76
Salt Slough, about 1 mile west of mouth, 150 feet north of north (right) bank of river, about 1,200 feet northwest of point where two channels of river come together, 2.5-foot willow tree bears NW. 66 feet, 1-foot willow bears SW. 180 feet, about 3,400 feet south and 500 feet west of northeast corner of sec. 24, T. 7 S., R. 9 E.; iron post set in concrete (U. S. C. E. b. m. 404)	66.48
T. 7 S., R. 9 E., about 3,000 feet west and 1,600 feet north of southeast corner of sec. 13, 150 feet northeast of northeast bank of river, about 1,200 feet southeast of inlet of slough (50 feet wide), oak tree bears S. 7° E. 420 feet; iron post set in concrete (U. S. C. E. b. m. 405)	64.25
T. 7 S., R. 9 E., about 2,900 feet west and 900 feet north of southeast corner of sec. 11, 140 feet northeast of northeast river bank, about 350 feet north of north bank of slough 60 feet wide, about 1,700 feet southeast of bank of slough 70 feet wide, 1-foot willow tree bears NE. 126 feet, 2-foot willow tree bears E. 225 feet; iron post set in concrete (U. S. C. E. b. m. 406)	62.77
Hills Ferry bridge, 100 feet west of west end of west approach, in south fence line of road, about 200 feet from west bank along road; iron post set in concrete (U. S. C. E. b. m. 407)	66.50
Hills Ferry bridge, 1 mile north of, on west bank in bend of slough, 600 feet south of south bank of river, about 4,200 feet west and 1,100 feet north of southeast corner of sec. 34, T. 6 S., R. 9 E., 1.5-foot blazed oak tree bears N. 15° E. 8 feet, 4-foot blazed white oak bears N. 71 feet; 4-foot blazed white oak bears N. 80° W. 15 feet; iron post set in concrete (U. S. C. E. b. m. 408)	64.85
Hills Ferry bridge, about 2 miles north of, 100 feet east of east bank of river, on west bank of dry lake and about 350 feet north of its inlet, 1-foot blazed white-oak tree bears S. 50° W. 32 feet, 2.5-foot blazed white oak bears S. 22° W. 54 feet, 4-foot blazed white oak bears N. 50° E. 25 feet; iron post set in concrete (U. S. C. E. b. m. 409)	61.46
T. 6 S., R. 9 E., about 3,600 feet west and 400 feet south of northeast corner of sec. 28, about 3.5 miles north of Hills Ferry bridge, east side of river, 250 feet from bank, 600 feet south of inlet of small slough, 4-foot blazed white-oak tree bears N. 10° E. 83 feet, 3-foot blazed white oak bears S. 70° E. 140 feet, 4-foot blazed white oak bears S. 8° W. 80 feet; iron post set in concrete (U. S. C. E. b. m. 410)	61.16
T. 6 N., R. 9 E., about 4,300 feet west and 1,000 feet north of southeast corner of sec. 16, about 1.3 miles southeast of mouth of Orestimba Creek, on levee 100 feet east of east river bank, about 300 feet south of where levee touches river bank, about 500 feet south of wire fence outside of bend in river to right; iron post set in concrete (U. S. C. E. b. m. 411)	59.94

Primary leveling by Roscoe Reeves in 1916

Near Los Banos

	Feet
Los Banos, 1.5 miles west of, at T road forks south, in telephone pole 45–13; spike, painted "125" on pole	124.74
Los Banos, 0.5 mile west of, 360 feet west of canal, in telephone pole 46; spike, painted "119" on pole	119.37
Los Banos, north edge of town, 75 feet west of railroad tracks, opposite creamery, 25 feet south of canal, on west side of public highway; standard iron post stamped "117 G 1909 Cal"	116.883

MERCED, HAYSTACK MOUNTAIN, AND PLANADA QUADRANGLES

[Latitude 37° 15′–37° 30′; longitude 120° 15′–120° 30′]

MERCED AND TUOLUMNE COUNTIES

Primary leveling by Roscoe Reeves in 1915

From point 3.7 miles southeast of Merced Falls southeast along highways to Billy Grade ranch

	Feet
Merced Falls, 4.6 miles southeast of, 0.8 mile northwest of intersection of old Millerton and Hornitos roads, near small summit; point on boulder marked "526"	526.06
T. 5 S., R. 15 E., sec. 25, 5.5 miles southeast of Merced Falls, at intersection of old Millerton Road and Hornitos-Rotterdam Road, on concrete bridge over small creek, south side and west end; bronze tablet stamped "449"	449.943
C. H. L. & W. Co.'s ranch house, 1.5 miles southeast of, in low swale, 15 feet west of road; point on rock, marked "432"	432.37
C. H. L. & W. Co.'s ranch, 2.7 miles southeast of, near top of small hill, 150 feet southeast of isolated tree; point on rock, marked "409"	409.30
C. H. L. & W. Co.'s ranch, 3.9 miles southeast of, 0.65 mile southeast of conspicuous butte covered with flat strata near road, 60 feet east of road, beside pile of boulders; point on rock, marked "370"	370.50
Merced Falls, 10.5 miles southeast of, 1.3 miles northwest of Billy Grade ranch, 300 feet north of Burns Creek crossing, 25 feet northeast of road; iron post stamped "316"	316.648
Merced Falls, 11.7 miles southeast of, in base of south gatepost to gate leading to barn at the Billy Grade ranch; railroad spike, marked "327"	327.33

From Plainsburg School north and west along highways to Lingard

Le Grand, 4.2 miles west by 1 mile north of, 1 mile north of Plainsburg, in northwest corner of T road forks west, in power-line pole; railroad spike marked "222"	222.35
Plainsburg, 1 mile north by 1 mile west of, 50 feet east of north-and-south fence, on north side of road; iron post stamped "211"	212.161
Plainsburg, 1 mile north by 2 miles west of, in front of old ranch house, in base of first telephone pole east of north-and-south fence and on north side of road; railroad spike marked "206"	206.35
Plainsburg, 1 mile north by 3 miles west of, in northwest corner of T road forks north, in post; railroad spike marked "197"	197.63
Lingard siding, 1 mile north by 1 mile east of, at railroad crossing, in base of power-line pole in front of farmhouse; railroad spike marked "190"	190.70

	Feet
Merced Falls, 3.5 miles southeast of, near forks of Hornitos and Millerton roads, in base of telephone pole on west side of gate; railroad spike marked "504"	504.83
Merced Falls, 3.75 miles southeast of, 0.25 mile southeast of forks of Hornitos and Millerton roads, 150 feet east of latter road, on large boulder 3 feet high; bronze tablet stamped "519"	519.331

Primary leveling by C. H. Semper in 1905

From Merced along highway to Merced River

Merced, southeast corner of county courthouse; aluminum tablet stamped "171 B"	171.561
Merced, 4.3 miles north of, at entrance to Crocker Huffman back ranch, west side of road, 20 feet north of gate; iron post stamped "175 B"	175.662
Sixmile House, northeast corner of fork with road to east; iron post stamped "206 B"	206.215
Sixmile House, 3.3 miles north of, 65 feet south of bridge over creek, east side of road; iron post stamped "377 B"	377.389
Sixmile House, 6.7 miles north of, at northwest corner of fork with road to west; iron post stamped "284 B"	284.353

From Amsterdam southeast along railroad to Merced

Amsterdam, 3.3 miles southeast of, north margin of railroad and highway, 4 feet east of milepost 157; iron post stamped "196 B"	196.424
Amsterdam, 6.4 miles southeast of, at southwest corner of fork with road to Atwater, at J. J. Gray's ranch house; iron post stamped "175 B"	175.773

BERENDA, LINGARD, MERCED, AND PLAINSBURG QUADRANGLES

[Latitude 37°–37° 22′ 30″; longitude 120° 07′ 30″–120° 30′]

MADERA AND MERCED COUNTIES

Precise leveling by C. H. Semper in 1901–2

From Merced southeast along Southern Pacific R. R. to milepost 181

	Feet
Merced, in southeast corner of county courthouse; aluminum tablet stamped "171 B"	171.561
Merced, 3.2 miles south of, opposite milepost 154, east side of track, at edge of highway; iron post stamped "178 B"	178.950
Milepost 157, opposite, east side of track, at edge of highway; iron post stamped "187 B"	188.036
Milepost 160, opposite, east side of track, at edge of highway, iron post stamped "198 B"	198.928
Athlone, in front of station; top of rail	204.4
Athlone, 2.5 miles south of, opposite milepost 163, east side of track, at edge of highway; iron post stamped "217 B"	217.857
Milepost 156, 150 feet south of, east side of track, at edge of highway; iron post stamped "233 B"	233.202
Minturn, in front of station; top of rail	239.0
Minturn, 1.9 miles south of, opposite milepost 169, east side of track, at edge of highway; iron post stamped "241 B"	241.073
Milepost 172, opposite, east side of track, at edge of highway; iron post stamped "247 B"	247.181

	Feet
Milepost 175, opposite, east side of track, at edge of highway; iron post stamped "249 B"	249.759
Berenda, in front of station; top of rail	250.7
Berenda, 1.3 miles south of, 18 feet south of milepost 178, west of track, at edge of highway; iron post stamped "248 B"	248.740
Milepost 181, 15 feet south of, west side of track, at edge of highway; iron post stamped "270 B"	270.920

Primary leveling by C. H. Semper in 1905 and L. F. Biggs in 1908

From Merced north along highway to Merced River

Merced, southeast corner of county courthouse; aluminum tablet stamped "171 B"	171.561
Merced, 4.3 miles north of, at entrance to Crocker Huffman back ranch, west of road, 20 feet north of gate; iron post stamped "175 B"	175.665
Sixmile House, northeast corner of fork with road to east; iron post stamped "206 B"	206.218
Sixmile House, 3.3 miles north of, 65 feet south of bridge over creek, east of road; iron post stamped "377 B"	377.392
Sixmile House, 6.7 miles north of, at northwest corner of fork with road to west; iron post stamped "284 B"	284.356

From Amsterdam southeast along railroad to Merced

Amsterdam, 3.3 miles southeast of, north edge of railroad and highway, 4 feet east of milepost 157; iron post stamped "196 B"	196.427
Amsterdam, 5.4 miles southeast of, at southwest corner of fork with road to Atwater, at J. J. Gray's ranch house; iron post stamped "175 B"	175.776

From Berenda northeast along Southern Pacific R. R. to Daulton

Berenda, 3 miles north of, 200 feet north of Atchison, Topeka & Santa Fe Ry. crossing, west edge of Southern Pacific R. R. right of way, 10 feet south of milepost 181; iron post stamped "279 B 1909 B. V."	279.211
Talbot, in front of station; top of rail	333.4
Talbot, 800 feet north of station, west edge of railroad right of way, at road crossing; iron post stamped "331 B 1909 B. W."	331.713
Daulton, in front of station; top of rail	401.0

From Merced Falls via Hornitos to Mount Bullion School

Merced Falls, at northeast corner of yard of Merced Falls Power Co., on edge of road; iron post stamped "351 B"	351.565
Merced Falls, south corner of bridge over Merced River; top of bolt over pier, painted "350 B. M. 1"	349.77
Merced Falls, 1.7 miles east of, 100 feet south of road, on summit of small hill, in base of oak tree 20 inches in diameter; spike with aluminum tag stamped "499 B. M. 2"	499.83
Merced Falls, 3.2 miles east of, 15 feet south of road, 0.94 mile south of ranch house, in base of oak tree 24 inches in diameter; spike with aluminum tag stamped "745 B. M. 3"	745.58

	Feet
Merced Falls, 4.9 miles east of, 1,000 feet west of road junction, 20 feet south of road; chisel point on boulder, painted "910 B. M. 4"	910.55
Merced Falls, 5.5 miles east of, 1 mile south of Hornitos, 15 feet east of road, near sharp turn in road, 25 feet north of oak tree, in boulder; aluminum tag stamped "829 B 1908 B. A."	830.184
Hornitos, 0.9 mile east of, north side of road, at east end of olive orchard, in base of oak tree 24 inches in diameter; spike with aluminum tag stamped "871 B. M. 6"	872.79
Hornitos, 2.2 miles east of, south side of road, west bank of drain, in base of oak tree 20 inches in diameter; spike with aluminum tag stamped "980 B. M. 7"	981.66
Hornitos, 3.2 miles east of, 0.5 mile west of Ruth Pierce mine, north side of road, on summit of small ridge, in boulder; aluminum tablet stamped "1094 B 1908 B 13"	1,095.006
Hornitos, 4 miles east of, southwest corner of intersection of road to Indian Gulch, 1,000 feet east of Ruth Pierce mine, in base of fence post; spike with aluminum tag stamped "1144 B. M. 8"	1,145.53
Hornitos, 4.7 miles east of, 2 miles east of Ruth Pierce mine, 500 feet south of house, 250 feet east of drain at bend of road, on boulder painted "1153 B. M. 9"; chisel point	1,154.59
Hornitos, 6.4 miles east of, north side of road, 0.4 mile west of Molony ranch house, on west line of Merced grant at junction of Cathray Valley and Mariposa road, on boulder; aluminum tablet stamped "1160 B 1908 B. C."	1,161.893
Mount Bullion, 6 miles west of, 6.9 miles east of Hornitos, north side of road, north bank of canyon, in boulder painted "1434 B. M. 10"; chisel point	1,435.54
Mount Bullion, 5.3 miles west of, east side of road, on summit of rise, at ruin of old house, in base of oak tree 20 inches in diameter; spike with aluminum tag stamped "1702 B. M. 11"	1,703.80
Mount Bullion, 4.2 miles west of, on summit of ridge, 25 feet south of road, in boulder; aluminum tablet stamped "1828 B 1908 B. D."	1,829.173
Mount Bullion, 3.5 miles west of, 60 feet northeast of creek, 150 feet east of water trough, north side of road, on rock painted "1680 B. M. 12"; chisel point	1,681.25
Mount Bullion, 2.5 miles west of, 50 feet west of old house, north side of road, on boulder painted "1837 B. M. 13"; chisel point	1,838.42
Mount Bullion, 1.2 miles west of, east side of road, opposite mine, west bank of creek, in base of oak tree 20 inches in diameter; spike with aluminum tag stamped "1964 B. M. 14"	1,965.41
Mount Bullion, 0.5 mile west of, north side of road, on summit of hill, in base of pine tree 24 inches in diameter; spike with aluminum tag stamped "2217 B. M. 15"	2,218.02
Mount Bullion, 200 feet east of schoolhouse, 30 feet north of road; iron post stamped "2177 B 1908 B. E."	2,178.756
(Value from east, 2,175.750; closure error, 3 feet.)	

MERCED FALLS QUADRANGLE

[Latitude 37° 30′–37° 37′ 30″; longitude 120° 15′–120° 22′ 30″]

MARIPOSA AND MERCED COUNTIES

Primary leveling by D. S. Birkett in 1915

From Merced Falls southeast along highways 3.7 miles

	Feet
Merced Falls, at northeast corner of yard of Merced Falls Power Co., on edge of road; iron post stamped "351 B" (see Bull. 342, p. 115)	351.565
Merced Falls, 0.5 mile east of, on extreme north end of concrete abutment to approach of steel highway bridge and on west side of bridge; chiseled square and "U. S."	353.37
Merced Falls, 1.4 miles southeast of, 0.85 mile south of steel bridge over Merced River, near top of hill, east side of road, in base of telephone pole; railroad spike marked "456"	456.13
Merced Falls, 2 miles southeast of, in northwest corner of forks of Hornitos and Old Mill roads; iron post stamped "437"	437.206

OAKDALE QUADRANGLE

[Latitude 37° 45′–37° 52′ 30″; longitude 120° 45′–120° 52′ 30″]

STANISLAUS COUNTY

Primary leveling by G. L. Hagman in 1911

From point 4.8 miles north of Burnett south to Burnett

	Feet
Burnett, 4.8 miles north of, where road turns west, at southwest corner, on fence line; iron post stamped "167 B 1911"	167.232
Burnett, 4 miles north of, north of gate, west side of road, in base of fence post; spike, aluminum tag stamped "190.26"	190.67
Burnett, 3.1 miles north of, on west side of road, in base of fence post; spike, aluminum tag stamped "194.27"	194.18
Burnett, 2.3 miles north of, on east side of road, north end of gate to private road east, in base of gatepost; spike, painted and scribed "U. S. B. M. 196"	197.00
T. 1 S., R. 10 E., northeast corner of sec. 33, near top of hill, at west edge of road; center of top of metal corner post, painted "U. S. B. M. 204"	204.40
Burnett, 0.9 mile north of, at east side of road, in base of fence post; spike, aluminum tag stamped "179.28"	179.67
Burnett, at northwest corner of road forks; iron post stamped "185 B"	186.069

OWENS CREEK AND PLANADA QUADRANGLES

[Latitude 37° 15′–37° 22′ 30″; longitude 120° 07′ 30″–120° 22′ 30″]

MARIPOSA AND MERCED COUNTIES

Primary leveling by Roscoe Reeves in 1915

From Billy Grade ranch south along highways to Le Grand

	Feet
Billy Grade ranch, 0.8 mile south of, 15 feet east of road, on top of half-buried boulder; painted circle, painted "384"	384.78
Billy Grade ranch, 1.6 miles south of, 210 feet southwest of gate in north and south fence, 300 feet west of old sheep herder's camp, on east side of road; iron post stamped "364"	364.503

	Feet
Le Grand, 8.5 miles north of, 1.5 miles north by 0.6 mile east of Cunningham School, in base of west gatepost to road leading north to Merced Falls; railroad spike, marked "324"	325.08
Le Grand, 8.5 miles north of, corners of secs. 5, 6, 7, and 8, T. 7 S., R. 16 E., in southwest corner of T road forks south, in base of corner fence post; railroad spike, marked "319"	319.93
Le Grand, 7 miles north of, 800 feet north of Cunningham School, 40 feet north of east and west fence line, on west edge of north and south road; iron post stamped "303"	303.512
Le Grand, 5 miles north of, 500 feet southeast of large barn, in base of fence post; railroad spike, marked "281"	281.41
Le Grand, 4.1 miles north of, 700 feet north of T road forks north, in west end of north head sill of bridge over Owens Creek; railroad spike, marked "267"	267.94

SANDYMUSH QUADRANGLE

[Latitude 37° 07′ 30″–37° 15′; longitude 120° 30′–120° 37′ 30″]

MERCED COUNTY

Primary leveling by Roscoe Reeves, in 1915

From sec. 24, T. 9 S., R. 13 E., along highways west 4 miles, thence northwest and north to sec. 13, T. 8 S., R. 12 E.

	Feet
T. 9 S., R. 13 E., at quarter corner south side of sec. 23, 30 feet northeast of corner of L road north and west, in line of fence; iron post stamped "130"	130.500
T. 9 S., R. 13 E., southwest corner of sec. 23, 600 feet north of farmhouse, in corner fence post; railroad spike, marked "128"	128.33
T. 9 S., R. 13 E., southwest corner of sec. 21, 0.5 mile east of farmhouse, on north gatepost of second-class road; railroad spike, marked "115"	115.80
T. 9 S., R. 13 E., sec. 20, 250 feet east of farmhouse, northeast corner of yard; iron post stamped "110"	110.704
T. 9 S., R. 13 E., near center of NW. ¼ sec. 18, in south post of gate in fence line running northwest; railroad spike, marked "107"	107.72
T. 9 S., R. 12 E., NE. ¼ sec. 11, 0.5 mile south of the Hoglan ranch house (Miller & Lux), 50 feet east of T in fences, in line of fence; iron post stamped "104"	104.383
Hoglan ranch house (Miller & Lux), 500 feet northeast of, in pile at northwest end of bridge over slough; railroad spike, marked "108"	108.18
T. 8 S., R. 12 E., southeast corner of sec. 26, 1.5 miles northeast of Hoglan ranch house (Miller & Lux), in corner fence post; railroad spike, marked "110"	110.54
T. 8 S., R. 12 E,, 750 feet northeast of southwest corner of sec. 24, 250 feet northwest of ranch house, in northeast corner of concrete rim of tank; bronze tablet stamped "117"	116.873
T. 8 S., R. 12 E., southwest corner of sec. 13, on east gatepost; railroad spike, marked "110"	110.68
T. 8 S., R. 12 E., northwest corner of sec. 13, near north corner common to Sandy Mush and Turner ranch quadrangles; iron post stamped "113" (D. S. Birkett, 1913)	113.135

	Feet
Le Grand, 4.1 miles north of, in southeast corner of T road fork south, 20 feet south of corner fence post; iron post stamped "293"	293.652
Le Grand, 3.2 miles north of, 0.9 mile south of T road fork south, on north gatepost to second-class road east; railroad spike, marked "276"	276.47
Le Grand, 2.8 miles north of, 200 feet east of road; iron post stamped "323" (Le Grand triangulation station)	323.916
Le Grand, 1.6 miles north of, on east side of road, in base of corner fence post; railroad spike, marked "257"	257.27
Le Grand, 0.7 mile north of, on concrete wall at south end and on east side of bridge over Mariposa Creek, 3.5 feet southeast of end of wooden bridge; chiseled square, painted "257" (in Le Grand quadrangle)	257.94

SNELLING QUADRANGLE

[Latitude 37° 30′–37° 37′ 30″; longitude 120° 22′ 30″–120° 30′]

MERCED AND STANISLAUS COUNTIES

Primary leveling by D. S. Birkett in 1915

From sec. 32, T. 3 S., R. 14 E., along highways southeast and south to Snelling

	Feet
Anderson School, 3.2 miles northwest of, 0.55 mile north of Merced-Stanislaus county line, in line with east and west fence, on west side of road, in gatepost; railroad spike, marked "U. S. B. M. 373"	373.78
Merced-Stanislaus county line, 400 feet north of, at dim road to west, at fence corner marked "338"; ground	338.6
La Grange, 4.5 miles south and 1 mile east of, 0.45 mile southeast of Meced-Stanislaus county line, 0.45 mile northwest of ranch house, in line with east and west fence, on west side of road; iron post stamped "351 1915"	351.736
Anderson School, 1.3 miles northwest of, 0.45 mile south of ranch house, on west side of road, in gatepost; railroad spike marked "U. S. B. M. 319"	319.42
Anderson School, 0.4 mile north of, at top of hill, on west side of road, in fence post; railroad spike marked "U. S. B. M. 329"	329.10
Anderson School, 0.1 mile north of, 4 miles north and 0.5 mile east of Snelling, in northeast corner of bridge over Dry Creek, in concrete abutment; bronze tablet stamped "275 1915"	275.693
Anderson School, 0.6 mile south of, in northwest corner of bridge; floor marked "276"	276.5
Anderson School, 1 mile south of, in northwest corner of crossroads, in large corner fence post; railroad spike marked "U. S. B. M. 287"	287.40
Anderson School, 1.25 miles south of, 50 feet south of T road (private) west to ranch house, on south end and on west side of top of concrete arch culvert; chiseled square marked "270"	270.00
Snelling, 1.8 miles north by 0.5 mile east of, about 0.4 mile north of old ranch house, on west side of road, in fence post; railroad spike marked "U. S. B. M. 282"	282.21
Snelling, 1 mile north by 0.5 mile east of, on east side of small culvert; top of culvert marked "313"	313.0

	Feet
Snelling, 0.8 mile north by 0.5 mile east of, at top of hill, on west side of road, in fence post; railroad spike marked "U. S. B. M. 331"	331.58
Snelling, 0.3 mile north by 0.5 mile east of; top of small wooden bridge over small creek, marked "255"	255.8
Snelling, 0.5 mile east of, at T road north, 20 feet south of Yosemite Valley R. R., on east side of road, at southeast corner, on top of concrete culvert over irrigation ditch; chiseled square marked "U. S. B. M. 265"	265.55
Snelling, at southwest corner of Lewis and Third streets; iron post stamped "259 B" (Bull. 342, p. 115)	259.448

SONORA QUADRANGLE

[Latitude 37° 30′–38°; longitude 120°–120° 30′]

MARIPOSA, MERCED, STANISLAUS, AND TUOLUMNE COUNTIES

Primary leveling by J. B. Lippincott in 1896

From Mount Diablo base northeast via Sonora to point near Soulsbyville

	Feet
Goodwin's ranch, 1 mile east of house, 6 miles west of Jamestown, on north side of road; iron post stamped "1389"	1,390.068
Goodwin's wine cellar, on north step of, about 6 miles west of Jamestown and 3.5 miles north of Chinese camp; copper plug stamped "1176"	1,176.732
Jamestown, half a block west of Sisson's Hotel, in front wall in the east end of the brick building with iron doors and a stone pavement on south side of road; bronze tablet stamped "1403"	1,403.438
Sonora, in south post of east entrance in street wall of courthouse; bronze tablet stamped "1825"	1,825.53
Sonora, east edge of court of Victoria Hotel, facing Washington St., in outside wall 1 foot south of gate; copper bolt stamped "1794"	1,794.792
Soulsbyville, on north side of road to, at junction about 3 miles east of Sonora, near fence at Cherokee ranch; iron post stamped "2144"	2,144.643

Primary leveling by C. H. Semper and R. A. Farmer in 1905

From Merced River northeast to Snelling, thence east to Merced Falls, thence northeast to Coulterville, thence east to point 2.4 miles southeast of Bower cave

Snelling, 1.7 miles southwest of, 640 feet north of Merced River roller mills, 60 feet southeast of end of bridge over Merced River, at fence line; iron post stamped "243 B"	243.554
Snelling, at southwest corner of Lewis and Third streets; iron post stamped "259 B"	259.448
Snelling, 2.7 miles east of, on south side of road, in line with east side of I. J. Buckley's brick ranch house; iron post stamped "291 B"	291.466
Merced Falls, at northeast corner of yard of Merced Falls Power Co., on margin of road; iron post stamped "351 B"	351.565
Merced Falls, 2.9 miles north of, at summit of mountains, 30 feet west of road; iron post stamped "764 B"	764.265
Webbs, at southwest corner of yard fence, at edge of road; iron post stamped "1046 B"	1,046.393

	Feet
Peter Senges, at gate leading to ranch house; iron post stamped "1128 B"	1,128.398
Peter Senges, 1.5 miles north of, at junction of Piney Creek with Merced River, 125 feet south of creek and 700 feet west of river, near corner of fence; iron post stamped "556 B"	556.419
Baxter post office, northeast corner of yard fence; iron post stamped "1250 B"	1,250.352
Baxter, 3.1 miles north of, at junction of roads to Coulterville and Horseshoe Bend, 10 feet south of stage station office; iron post stamped "858 B"	858.405
Coulterville, opposite southeast corner of Jeffrey's Hotel, at corner of street; iron post stamped "1676 B"	1,676.532
Coulterville, 2.5 miles east of, 0.6 mile east of forks of road, at horseshoe bend in road, south side of fence line, near oak tree 4 feet in diameter; iron post stamped "2211 B"	2,211.474
Coulterville, 5.7 miles east of, at summit of mountain, 0.4 mile east of Mountain View saloon, 15 feet south of road; iron post stamped "3346 B"	3,346.479
Bean Creek bridge, 1.5 miles east of, in front of W. H. Dudley's ranch house, at northwest corner of front-yard fence; iron post stamped "2984 B"	2,984.503
Bower Cave, at road crossing North Fork of Merced River, 50 feet east of river, at north edge of road; iron post stamped "2349 B"	2,349.478
Bower Cave, 2.4 miles southeast of, at northeast corner of school yard; iron post stamped "2939 B"	2,939.509

THALHEIM QUADRANGLE

[Latitude 37° 45′–37° 52′ 30″; longitude 120° 52′ 30″–121°]

SAN JOAQUIN AND STANISLAUS COUNTIES

Primary leveling by G. L. Hagman in 1911

At point 5.7 miles north of Burnett

	Feet
Burnett, 5.7 miles north of, on west side of road, in base of telephone pole; spike, aluminum tag stamped "163.25"	163.20

From Burnett to Burwood School

Burnett, 1 mile west of, in base of telephone pole 33–6; spike, aluminum tag stamped "176.29"	177.10
Burnett, 2 miles west of, in base of telephone pole 32–8; spike, aluminum tag stamped "160.30"	160.39
Burnett, 3 miles west of, in base of telephone pole 31–10; spike, aluminum tag stamped "154.31"	154.17
Escalon, 3 miles east of, at southwest corner of T road south; iron post stamped "147 B 1911"	147.688
Escalon, 3 miles east by 0.7 mile south of, on west side of road, in base of gatepost; spike, aluminum tag stamped "145.40"	145.68
Burwood School, 2.8 miles northeast of, north side of road, in base of corner fence post; spike, aluminum tag stamped "154.39"	154.06
Burwood School, 1.8 miles northeast of, at T road north, southwest corner of base of fence post; spike, aluminum tag stamped "141.38"	141.66
Burwood School, 1.1 miles east of, northeast corner of T road; iron post stamped "141 B 1911"	140.866

	Feet
Santa Fe Ry. crossing; top of west rail	134.5
Burwood School, 0.7 mile west of, in base of fence post, at southwest corner of T road; spike, aluminum tag stamped "127.37"	127.22
Burwood School, 1.6 miles west of, south side of road, in base of fence post; spike, aluminum tag stamped "122.36"	122.49
Escalon, 2.8 miles south of, in top of northwest abutment of bridge over Stanislaus River; aluminum tablet stamped "88 B 1911"	88.711

From point 2.8 miles south of Escalon north along highways to point 3 miles south of Farmington

Escalon, 1.7 miles south of, on east side of road, in base of corner fence post; spike, aluminum tag stamped "116.41"	116.26
Escalon, 0.8 mile south of, on west side of road, in base of corner fence post; spike, aluminum tag stamped "113.42"	113.39
Escalon, 500 feet west of station, at road crossing; top of rail	118.4
Escalon, McPherson's brick store, in front face of east wall; aluminum tablet stamped "117 B 1911"	117.285
Escalon, 1 mile north of, on east side of road, in base of telephone pole 26–2; spike, aluminum tag stamped "116.43"	116.40
Escalon, 2 miles north of, on east side of road, in base of telephone pole 25–3; spike, aluminum tag stamped "120.44"	120.16
Escalon, 3 miles north of, at northeast corner of crossroads; iron post stamped "112 B 1911"	112.726
Escalon, 4 miles north of, on east side of road, in base of telephone pole 23–3; spike, aluminum tag stamped "109.45"	109.13
Escalon, 4.5 miles north of, where road is crossed by power line, northeast corner of T road east, in base of telephone pole; spike, aluminum tag stamped "109.46"	109.30
Escalon, 5.5 miles north of, southwest corner of T road west; iron post stamped "107 B 1911"	107.062

TRIGO QUADRANGLE

[Latitude 37° 52′ 30″–38°; longitude 120° 52′ 30″–121°]

SAN JOAQUIN AND STANISLAUS COUNTIES

Primary leveling by G. L. Hagman in 1911

From Farmington north 4 miles

	Feet
Farmington, in front of station; top of west rail	112.7
Farmington, south of Central Hotel, at watering trough, in base of telephone pole; spike, aluminum tag stamped "108.13"	108.16
Farmington, 1,800 feet south of, in northwest abutment of bridge over Little John Creek; aluminum tablet stamped "109 B" (this bench mark is on an unchecked spur line)	109.780
Farmington, 1 mile north of, on east side of road, in base of telephone pole; spike, aluminum tag stamped "112.14"	112.66
Farmington, 2 miles north of, on east side of road, in base of telephone pole; spike, aluminum tag stamped "150.15"	150.71
Farmington, 3 miles north of, at junction of Copperopolis Road, in southwest corner of road crossing; iron post stamped "148 B 1911"	148.557
Farmington, 4 miles north of, at T road, northwest fence corner, in base of fence post; spike, aluminum tag stamped "161.16"	161.03

From Farmington east along highways to point 7.7 miles north of Burnett

	Feet
Farmington, 1.1 miles east of, at southwest corner of road forks, opposite county water tank, in base of telephone pole; spike, aluminum tag stamped "115.19"	115.85
Farmington, 1.5 miles south of, private T road east, in base of telephone pole 19–10; spike, aluminum tag stamped "107.48"	106.73
Farmington, 0.9 mile south of, east side of road, in base of telephone pole 18–13; spike, aluminum tag stamped "110.49"	109.53
Farmington, 2.2 miles east of, at south side of road, in base of telephone pole; spike, aluminum tag stamped "122.20"	122.20
Farmington, 2.6 miles southeast of, on top of northeast abutment of steel bridge over Little John Creek; chiseled mark, painted "U. S. B. M. 122"	122.70
Farmington, 3.5 miles southeast of, at southwest corner of T road south; iron post stamped "129 B 1911"	129.864
Farmington, 4.5 miles southeast of, on south side of road, in base of telephone pole; spike, aluminum tag stamped "134.21"	135.95
Farmcottage School, 0.4 mile west of, on south side of road, in base of telephone pole; spike, aluminum tag stamped "141.22"	142.84
Farmcottage School, 0.6 mile east of, south side of road, in base of telephone pole; spike, aluminum tag stamped "165.23"	166.88
Farmcottage School, 1.4 miles east of, southeast corner of T road south; iron post stamped "160 B 1911"	161.284
Burnett, 7.7 miles north of, at east side of road, in base of gate post; spike, aluminum tag stamped "166.24"	166.86

Near Farmington

Farmington, 3 miles south of, southeast corner of T road east, in base of telephone pole 20–12; spike, aluminum tag stamped "106.47"	105.74

ARENA, ATWATER, CRESSY, AND TURLOCK QUADRANGLES

[Latitude 37° 15′–37° 30′; longitude 120° 30′–120° 52′ 30″]

MERCED AND STANISLAUS COUNTIES

Precise leveling by C. H. Semper in 1901–2

From Turlock southeast along Southern Pacific R. R. to Milepost 149

	Feet
Turlock, 0.6 mile south of, opposite milepost 128, on east edge of highway; iron post stamped "103 B"	103.364
Turlock, 3.6 miles south of, 5 feet north of milepost 131, west side of track; iron post stamped "111 B"	111.714
Milepost 134, 27 feet south of; iron post stamped "116 B"	116.875
Milepost 137, 5 feet north of, west side of track, at fence line; iron post stamped "129 B"	129.238
Livingston, in front of station; top of rail	131.0
Livingston, 2.5 miles south of, opposite milepost 140, east side of track, at edge of highway; iron post stamped "142 B"	142.265
Arena, in front of station; top of rail	140.9
Arena, 2.9 miles south of, opposite milepost 143, east side of track, at fence line; iron post stamped "154 B"	154.312
Atwater, in front of station; top of rail	148.1
Buhach, 60 feet north of station, opposite milepost 146; iron post stamped "153 B"	153.111

	Feet
Buhach, in front of station; top of rail	155.8
Milepost 149, opposite, east side of track, at edge of road; iron post stamped "154 B"	154.807

VOLTA QUADRANGLE

[Latitude 37°–37° 07′ 30″; longitude 120° 52′ 30″–121°]

MERCED COUNTY

Primary leveling by Roscoe Reeves in 1916

From west border of quadrangle east along highways to point near Los Banos

	Feet
T. 10 S., R 9 E., 2 telephone poles west of northeast corner of sec. 19, in telephone pole 38–12; spike painted "294" on pole	294.03
T. 10 S., R. 9 E., southwest corner of sec. 15, in telephone pole 39–14; spike painted "259" on pole	259.14
T. 10 S., R. 9 E., southwest corner of sec. 14, in telephone pole 40–14; spike painted "234" on pole	234.53
T. 10 S., R. 9 E., southwest corner of sec. 14, north edge of road; iron post stamped "233"	233.085
Los Banos, 5 miles west of, west side of canal, in telephone pole 41–18; spike painted "148" on pole	147.80
T. 10 S., R. 10 E., southwest corner of sec. 18, in telephone pole 42–13; spike painted "125" on telephone pole	125.63
T. 10 S., R. 10 E., 0.25 mile west of southeast corner of sec. 18, in northwest corner of crossroads; iron post stamped "129"	129.695
Los Banos, 2.5 miles west of, 300 feet west of Los Banos Creek, in telephone pole 44–8; spike painted "136" on pole	135.98

From point near center of quadrangle north along highways to Volta (spur line leveled twice to determine elevation of reset post at Volta)

Volta, 2 miles south of, north side of canal, in telephone pole; spike painted "122" on pole	122.51
Volta, 0.75 mile south of, 600 feet south of T road east, in front of red house, in telephone pole; spike painted "110"	110.80
Volta, in front of station; top of rail	103.8
Volta, 1,230 feet north of station, west side of track, 15 feet north of telephone pole; iron post stamped "101"	101.402
NOTE.—This post is 250 feet west of site of old bench mark described in Bull. 481, p. 85, and removed in 1916, the corrected elevation of which was 101.380.	
Los Banos, 1.5 miles west of, at T road south, in telephone pole 45–13; spike "125" painted on pole	124.74

DEGREE QUADRANGLE 37°–38°, 121°–122°

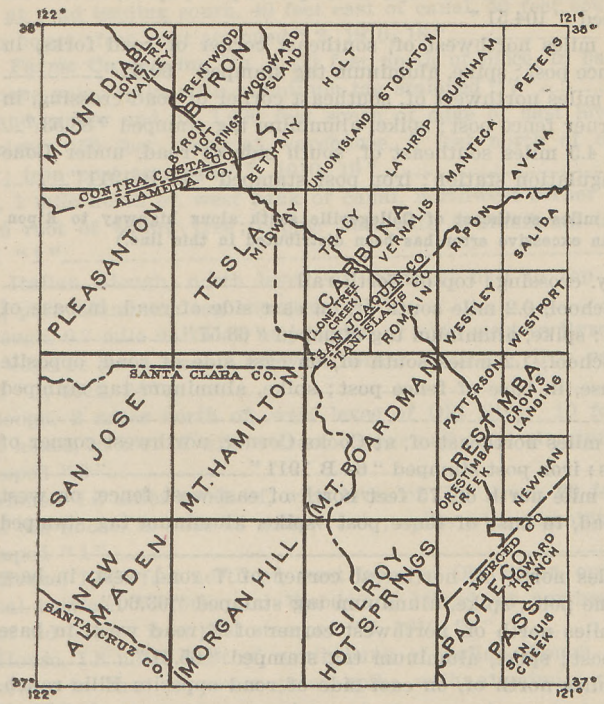


FIGURE 35.—Diagram of degree quadrangle 37°–38°, 121°–122°

AVENA QUADRANGLE

[Latitude 37° 45′–37° 52′ 30″; longitude 121°–121° 07′ 30″]

SAN JOAQUIN COUNTY

Primary leveling by G. L. Hagman in 1911

Near River School

	Feet
River School, 2.4 miles east of, north side of road, in base of fence post; spike, aluminum tag stamped "101.35"	100.96
River School, 1.4 miles east of, southwest corner of T road north; iron post stamped "93 B 1911"	93.469
River School, 0.3 mile east of, southwest corner of T road, in base of fence post; spike, aluminum tag stamped "88.34"	87.48
River School, 1.8 miles west of, northwest corner of T road, in base of telephone pole; spike, aluminum tag stamped "81.33"	80.27
River School, 1.8 miles west of, northwest corner of T road, in base of fence post; spike, aluminum tag stamped "73.32"	72.74
Ripon, 2.7 miles northeast of, southeast corner of road crossing; iron post stamped "67 B 1911"	67.638

From point 3 miles north of Escalon northwest along Mariposa Road to Collegeville

	Feet
Escalon, 4 miles northwest of, near Blundell ranch, on east side of road, in base of fence post; spike, aluminum tag stamped "105.50"	105.18
Escalon, 4.8 miles northwest of, where road is crossed by power line, south side of road, in base of telephone pole; spike, aluminum tag stamped "104.51"	103.87
Escalon, 5.7 miles northwest of, southeast corner of road forks, in base of fence post; spike, aluminum tag stamped "90.52"	90.18
Escalon, 6.5 miles northwest of, southeast corner of road crossing, in base of corner fence post; spike, aluminum tag stamped "88.53"	88.69
Collegeville, 4.5 miles southeast of, south side of road, under Lone Tree triangulation station; iron post stamped "75 B 1911"	75.570

From point 2 miles southeast of Collegeville south along highway to Ripon. (An excessive error has been distributed in this line.)

Santa Fe Ry. crossing; top of north rail	68.3
Wildwood School, 0.2 mile south of, on east side of road, in base of fence post; spike, aluminum tag stamped "63.57"	63.33
Wildwood School, 1.2 miles south of, on east side of road, opposite ranch house, in base of fence post; spike, aluminum tag stamped "61.58"	60.73
Atlanta, 1.7 miles northeast of, at Cooks Corner, northwest corner of crossroads; iron post stamped "64 B 1911"	62.917
Atlanta, 0.7 mile north of, 75 feet north of east-west fence, on west side of road, in base of fence post; spike, aluminum tag stamped "60.59"	59.12
Ripon, 4 miles north of, northwest corner of T road west, in base of telephone pole; spike, aluminum tag stamped "63.60"	62.50
Ripon, 3.2 miles north of, northwest corner of T road west, in base of fence post; spike, aluminum tag stamped "65.61"	64.11
Ripon, 2.5 miles north of, on east side of road opposite Ellis ranch, across road from large oak tree; iron post stamped "72 B 1911"	71.314
Ripon, 1.7 miles north of, on east side of road, in base of telephone pole 513–106; spike, aluminum tag stamped "63.62"	62.11

BYRON QUADRANGLE, COMPRISING BETHANY, BRENTWOOD, BYRON HOT SPRINGS, AND WOODWARD ISLAND 7½′ QUADRANGLES

[Latitude 37° 45′–38°; longitude 121° 30′–121° 45′]

ALAMEDA, CONTRA COSTA, AND SAN JOAQUIN COUNTIES

Primary leveling by B. A. Jenkins in 1907 and L. F. Biggs in 1910

From Bethany Ferry to Bethany

	Feet
Bethany, 100 feet east of station, on edge of right of way; iron post stamped "36, 1910, 4"	36.495

Primary leveling by L. F. Biggs in 1919

From Union Island quadrangle northwest along Southern Pacific R. R. to Bethany

Bethany, 1 mile southeast of, east end of concrete highway culvert, chiseled "U. S. 23"	23.45

From point 1 mile west of Camp No. 1 landing to Bixler

	Feet
Camp No. 1 landing, 1 mile west of, south bank of canal, 10 feet south of pumping plant, in top of pile; copper nail with aluminum tag stamped "2"	2.77
Old River Farms Co. landing No. 5, 800 feet east of, south edge of levee at road leading south, 40 feet east of canal, 50 feet south of pump house; iron post stamped "2, 1910, 18"	2.077
Old River Farms Co. landing No. 3, 50 feet north of office, in base of telephone pole; spike with aluminum tag stamped "7"	7.12
Coney Island, upper end of, 1,000 feet south of edge of east levee of old river, 150 feet south of warehouse, 5 feet north of old building; iron post stamped "7, 1910, 19"	7.508
Old Ferry, 1 mile north of, west bank of canal, northwest corner of house, in root of willow tree; copper nail with 0 aluminum tag stamped "1"	1.00
Mouth of Italian Slough, north levee, at landing; nail in top of snubbing post, aluminum tag stamped "11"	11.37
Italian Slough, 0.7 mile north of, at junction of road west to Byron, at west edge of levee, near northwest corner of house; iron post stamped "1, 1910, 24"	1.706
Italian Slough, 2 miles north of, west levee of Old River, 10 feet south of house, in root of willow tree; copper nail with aluminum tag stamped "0"	0.94
Mansion House, 1.3 miles south of, west levee of Old River, 20 feet north of old house, in base of willow tree; spike with aluminum tag stamped "1"	1.80
Mansion House, 1,000 feet north of, west levee of Old River, opposite canal between Victoria and Woodward Island, at northeast corner of old house; iron post stamped "3, 1910, 25"	3.302
Mansion House, 1.3 miles west of, south bank of Indian Slough, at pump house, in base of power pole; spike with aluminum tag stamped "2"	2.12
Mansion House, 2.5 miles west of, 2 miles south and 1 mile east of Bixler, 200 feet south of white house, 40 feet west of Indian Slough, at end of lane; iron post stamped "6, 1910, 26"	6.934
Bixler, 2 miles south of, at crossroads, in base of gum tree; spike with aluminum tag stamped "12"	12.28
Bixler, 1 mile south of, at crossroads, in base of power pole 0–20; spike with aluminum tag stamped "9"	9.96

From Bethany north and west to Oakley

Bethany, 1.5 miles northwest of, at T road west, in base of telephone pole; spike with aluminum tag stamped "43"	43.08
Mountain House School, 0.5 mile north by 1 mile west of, at T road north to Billy Campbell's ranch; iron post stamped "76, 1910, 20"	76.081
Byron, 5.2 miles south of, at power-line crossing, in base of power pole, 68–12; spike with aluminum tag stamped "81"	81.50
Byron, 3 miles southeast of, at junction of road to south, in base of power pole 1–8; spike with aluminum tag stamped "14"	14.02
Byron, 1.5 miles south of, at junction of road to Byron Hot Springs, east of railroad right of way; iron post stamped "23, 1910, 21"	23.471
Byron, south edge of town, 200 feet south of railroad crossing, in base of power pole 4–12; spike with aluminum tag stamped "25"	25.73

	Feet
Byron, 2 miles west of, at junction of road to west, on fence line; iron post stamped "165, 1910, 22"	165.191
Byron, 3 miles west by 2 miles north of, 1,500 feet east of Marsh Creek bridge, 700 feet east of junction of Martinez and Brentwood roads, 150 feet north of road at point of hill, in boulder outcrop; aluminum tablet stamped "209, 1910, 23"	209.156
Brentwood, 0.5 mile southwest of, 800 feet south of storehouse west of road, in base of 60-inch oak tree; spike with aluminum tag stamped "160"	160.28
Stone House, 1 mile north of, on west bank of Marsh Creek, 100 feet south of windmill, in base of sycamore tree; spike with aluminum tag stamped "111"	111.64
Stone House, 2 miles north of, 60 feet west of Marsh Creek, 2 feet west of house; iron post stamped "27 1910 100"	101.023
Brentwood, 1 mile west of, west abutment of steel bridge over Marsh Creek; aluminum tablet stamped "81, 1910, 28"	81.419
Brentwood, 1.5 miles northwest of, in base of milepost 81, Southern Pacific R. R.; spike with aluminum tag stamped "82"	82.90
Brentwood, 2 miles northwest of, at road crossing, east of right of way; iron post stamped "95, 1910, 29"	95.549
Ohara, 0.5 mile southeast of, at junction of road to north, in base of telephone pole; spike with aluminum tag stamped "84"	84.52
Oakley, 1 mile west of, at crossroads, in base of power pole 18–14; spike with aluminum tag stamped "28"	29.80
Oakley, west end of station, 30 feet south of track; iron post stamped "19"	19.480

From Middle River northeast to Empire Cut (unchecked spur line)

Middle River, 1 mile north of, in base of power pole 1–3; spike with aluminum tag stamped "—2" (below sea level)	—1.647
Middle River, 3 miles northeast of, at Empire Cut Landing No. 12, in base of power pole 3–8; spike marked "—0"	0.24
Middle River, 3 miles northeast of, at Empire Cut Landing No. 12, in base of power pole 3–9; spike marked "0"	0.555

From Tule west along Atchison, Topeka & Santa Fe Ry. to point 3 miles east of Antioch

Tule, in front of signboard; top of rail	11.7
Middle River, in front of station; top of rail	16.5
Middle River, at southeast corner of cannery; iron post stamped "B 1907 3, 3"	3.692
Orwood, in front of station; top of rail	14.2
Werner, in front of signboard; top of rail	12.4
Bixler, in front of signboard; top of rail	15.4
Bixler, 200 feet southeast of signboard, at road corner, 20 feet east of section corner; iron post stamped "B 1907 15 4"	14.722
Knightsen, west end of station, 40 feet south of track; iron post stamped "B 1907 27 5"	26.860
Oakley, in front of station; top of rail	18.8

Primary leveling by J. A. Vogelson in 1896

From Neroly southeast along Southern Pacific R. R. to Brentwood, thence south along road to Livermore

	Feet
Brentwood, west of track at north end of platform; iron post stamped "77"	76.890
Vascoe School, opposite, on west side of road; iron post stamped "401"	401.377
Vascoe divide, east side of road; iron post stamped "970"	969.767

BURNHAM QUADRANGLE

[Latitude 37° 52′ 30″–38°; longitude 121° 07′ 30″–121° 15′]

SAN JOAQUIN COUNTY

Primary leveling by G. L. Hagman in 1911

From point 8.5 miles east of Stockton along highway to point 2.5 miles east of Glenwood

	Feet
Chartville, 0.6 mile east of, near junction of Stockton-Milton road with Farmington road; iron post stamped "67" (Lippincott's b. m.)	67.051
Chartville, junction of Copperopolis road and Jackstone lane, at southeast corner, in base of fence post; spike, aluminum tag Marked "60.1"	60.95
Stockton, 7 miles east of, on Copperopolis road, on north side of road, in base of water tank trestle; spike, aluminum tag marked "50.2"	50.87
Stockton, 6 miles east of, junction of Copperopolis and Hornage roads, in northeast corner of road forks; iron post stamped "46–B"	45.809
Glenwood School, 0.6 mile south of, at east edge of road, in base of gate post; spike, aluminum tag stamped "49.3"	48.74
Glenwood School, at southeast corner of crossroads, in base of telephone pole; spike, aluminum tag stamped "47.4"	46.72
Glenwood School, 1 mile east of, opposite county water tank, in base of telephone pole; spike, aluminum tag stamped "55.5"	54.76
Glenwood School, 2 miles east of, at south side of road, in base of telephone pole; spike, aluminum tag stamped "64.6"	63.63
Lockeford, 11 miles south of, at intersection of roads, in base of power pole; nail, aluminum tab stamped "66.40"	66.15

Near Mount Carmel School

Mount Carmel School, 1 mile north of, west edge of road, in base of 12-inch oak tree; spike, aluminum tag stamped "607"	60.31
Mount Carmel School, at northeast corner of road crossing; iron post stamped "58 B"	58.653
Mount Carmel School, 1.1 miles east of, at south side of road, in base of telephone pole; spike, aluminum tag stamped "67"	67.51

From point 2.1 miles south of French Camp north along highways via Burnham to Mount Carmel School

French Camp, 2.1 miles south of, on east side of railroad, at road crossing, 200 feet south of milepost 85 (now 84), at fence line; iron post stamped "19 B 1901"	19.357

	Feet
French Camp, 2.1 miles south by 1 mile east of, northwest corner of T road west, in base of fence post; spike, aluminum tag stamped "20.64" (in Manteca quadrangle)	20.74
Castle School, 2.9 miles northeast of, at private T road east to Myer ranch, on west side of road, in base of fence post; spike, aluminum tag stamped "42.70"	42.48
Burnham, 2 miles southwest of, 300 feet southwest of Kaiser ranch, on east side of old lane, in base of oak tree; spike, aluminum tag stamped "47.71"	47.79
Burnham, 0.9 mile south of, on west side of road, in base of fence post; spike, painted and scribed "U. S. B. M. 53"	53.47
Burnham, southwest corner of railroad crossing, edge of right of way; iron post stamped "54 B 1911"	54.637
Burnham, 1 mile north of, at Collegeville, southwest corner of cross-roads, in base of fence post; spike, scribed and painted "U. S. B. M. 57"	57.16
Burnham, 2 miles north of, on east side of road, in base of gate post; nail, painted and scribed "U. S. B. M. 57"	57.71
Mount Carmel School, 0.6 mile south of, on east side of road, in base of gate post; spike, painted and scribed "U. S. B. M. 58"	57.97
From Collegeville east along highways 2.5 miles	
Collegeville, 1 mile southeast of, in base of county windmill; spike, painted and scribed "U. S. B. M. 63"	63.22

BURNHAM, HOLT, PETERS, STOCKTON, TRACY, AND WESTLEY QUADRANGLES

[Latitude 37° 30′–38°; longitude 121°–121° 30′]

SAN JOAQUIN AND STANISLAUS COUNTIES

Primary leveling by J. B. Lippincott in 1896 and B. A. Jenkins in 1907

At Stockton

	Feet
Stockton, southwest corner of Scott Ave. (south side of Mormon Channel) and Center St., on north iron doorsill, west end of Cool Corner saloon; "Cool Corner" bench mark	16.033
Stockton, southwest corner of Scott Ave. and Center St., 18 feet from curb corner and 12 feet north of iron doorsill; iron post stamped "16"	16.373
Stockton, at southeast head of channel, corner of Weber Ave. and Eldorado St., east of steps at corner post; iron plate	13.114
Stockton, on north side of courthouse, west side of walk; on top of stone post	16.5
Stockton, San Joaquin courthouse, in angle of wall near columns, between north door and first window west of it; bronze tablet stamped "18"	18.353
Stockton, Southern Pacific R. R. passenger station, Milton & Oakland branch; top of rail	19.1
From Stockton northeast along Milton road and Southern Pacific R. R. to Peters	
J. B. Marsh's house, at northeast corner of entrance to lean-to; iron post stamped "34"	34.055

From Patterson northwest along Southern Pacific R. R. to Tracy

	Feet
Patterson, 3.3 miles north of, east of track, 5 feet north of telegraph milepost 104; iron post stamped "111 Cal 1909 G"	110.461
Westley, 200 feet east of, front of station; iron post stamped "86 Cal 1909 G"	85.794
Westley, 3.3 miles northwest of, 25 feet east of track, 5 feet south of milepost 98; iron post stamped "85 Cal 1909 G"	85.170
Westley, 6.3 miles northwest of, 25 feet east of track, 5 feet south of telegraph milepost 94; iron post stamped "100 Cal 1909 G"	99.492
Westley, 9.3 miles northwest of, 25 feet east of track, 10 feet north of telegraph milepost 91; iron post stamped "100 Cal 1909 G"	99.306
Westley, 12.3 miles northwest of, 25 feet east of track, 10 feet south of telegraph milepost 88; iron post stamped "75 Cal 1909 G"	74.720
Westley, 15.3 miles northwest of, at Southern Pacific R. R. and Western Pacific R. R. crossing; top of rail, marked "78"	77.5
Westley, 15.3 miles northwest of, 75 feet east of Southern Pacific R. R. 100 feet north of Western Pacific R. R. at crossing, 10 feet south of milepost 85; iron post stamped "78 Cal 1909 G"	77.584

From Stockton west along Atchison, Topeka & Santa Fe Ry. to Tule switch

Stockton, in front of station; top of north rail	18.2
Stockton, 5.8 miles west of, 200 feet east of milepost 1127, where levee joins railroad embankment, on levee at fence corner; iron post stamped "1907 9 B 1"	9.205
Holt, 180 feet north of station, at edge of right of way, on fence line; iron post stamped "2 1907 B 2"	2.321

CARBONA QUADRANGLE, COMPRISING LONE TREE CREEK, ROMAIN, TRACY, AND VERNALIS 7½′ QUADRANGLES

[Latitude 37° 30′–37° 45′; longitude 121° 15′–121° 30′]

SAN JOAQUIN AND STANISLAUS COUNTIES

Primary leveling by L. F. Biggs in 1910

From point 1 mile west of Ellis south and east to San Joaquin bridge, thence northwest to Banta

	Feet
Ellis, 2 miles south of, at Western Pacific R. R. crossing; spike in base of telephone pole, aluminum tag stamped "168"	168.52
T. 3 S., R. 5 E., corner of secs. 4, 5, 8, and 9, 2.5 miles south by 1 mile west of Tracy, at Western Pacific R. R. crossing; iron post stamped "148, 1910, 5"	148.671
Tracy, 3.5 miles south by 1 mile west of, 2 miles south of Jefferson School, at railroad crossing; spike in base of telephone pole, aluminum tag stamped "199"	199.29
Tracy, 4.5 miles south by 1 mile east of, T. 3 S., R. 5 E., corner of secs. 14, 15, 22, and 23, at crossroads; iron post stamped "140, 1910, 6"	139.928
San Joaquin bridge, 4 miles west of, at Southern Pacific R. R. crossing; spike in base of telephone pole, aluminum tag stamped "83"	83.44
San Joaquin bridge, 0.5 mile west of, at T road; iron post stamped "45, 1910, 7"	47.455

	Feet
San Joaquin bridge, 1 mile northwest of, east side of road, at second-class road east; spike in base of telephone pole, aluminum tag stamped "41"	43.54
San Joaquin bridge, 2 miles northwest of, opposite T road west; spike in base of telephone pole, scribed and painted "33"	35.67
San Joaquin bridge, 4 miles northwest of, 5 miles southeast of Banta, east side of road, opposite power pole 19–2; iron post stamped "37, 1910, 8"	39.577
Banta, 3.7 miles southeast of, at crossroads; spike in base of telephone pole, aluminum tag stamped "31"	33.49
Banta, 2.5 miles southeast of, opposite second-class road west; spike in base of telephone pole, aluminum tag stamped "23"	24.83
Banta, 1.9 miles southeast of, at Western Pacific R. R. crossing; spike in base of telephone pole, marked "19"	21.10
Banta, 1 mile southeast of, at T road east; spike in base of telephone pole, aluminum tag stamped "18"	20.46

From point 1 mile west of Ellis east to Tracy

Ellis, 1 mile west of, 4 feet north of milepost 68; iron post stamped "102.656 B" (U. S. C. & G. S. b. m. P_3)	102.962
Tracy, 2 miles west of, at road crossing; spike in base of telephone pole, aluminum tag stamped "67"	67.27
Tracy, 1 mile west of; spike in base of milepost 70, aluminum tag stamped "65"	65.02
Tracy, 0.4 mile north of station, 4 feet north of milepost 72, on fence line north side of track; iron post stamped "54, 1910, 8" (U. S. C. & G. S. b. m.)	54.150

From point 3 miles west of Banta south to Tracy

Banta, 3 miles west of, at T road south to Tracy; spike in base of telephone pole 40–12; aluminum tag stamped "27"	27.60

Primary leveling by W. H. Monahan in 1909 and D. S. Birkett in 1913

From point 6.3 miles northwest of Westley northwest along Southern Pacific R. R. to Tracy

Westley, 7.3 miles northwest of, 25 feet east of track, 100 feet north of telegraph milepost 94; spike in fence post, aluminum tag stamped "104"	103.96
Westley, 8.3 miles northwest of, 25 feet east of track, 100 feet north of telegraph milepost 95; spike in fence post, aluminum tag stamped "101"	100.67
Westley, 9.3 miles northwest of, 25 feet east of track, 10 feet north of telegraph milepost 92; iron post stamped "100 G Cal 1909"	99.366
Westley, 10.3 miles northwest of, 10 feet east of track, 75 feet west of milepost 91; spike in whistle signpost, aluminum tag stamped "94"	94.03
Westley, 11.3 miles northwest of, 10 feet north of telegraph milepost 90, on east side of track; spike in fence post, aluminum tag stamped "79"	79.042
Westley, 12.3 miles northwest of, 25 feet east of track, 10 feet south of telegraph milepost 89; iron post stamped "75 G 1909 Cal"	74.780

	Feet
Westley, 13.2 miles northwest of, on east side of track, 200 feet south of milepost 88; spike in whistle post, aluminum tag stamped "77"	76.5
Westley, 14.3 miles northwest of, 25 feet east of track, 20 feet north of milepost 87; spike in fence post, aluminum tag stamped "80"	79.1
Westley, 15.3 miles northwest of, at Southern Pacific and Western Pacific crossing; top of rail, marked "78"	77.6
Westley, 15.3 miles northwest of, 75 feet east of Southern Pacific R. R. track and 100 feet north of Western Pacific R. R. track where these railroads cross, 10 feet south of milepost 86; iron post stamped "78 G 1909 Cal"	77.709
Westley, 16.3 miles northwest of, 40 feet east of track; spike in telegraph milepost 85, aluminum tag stamped "70"	69.685

Precise leveling by the U. S. Coast and Geodetic Survey in 1910–11

Near Tracy

Banta, opposite milepole 74 on Southern Pacific R. R. right of way, 250 meters east of Southern Pacific station; Geological Survey iron post stamped "22.121" (U. S. C. & G. S. b m. T–8)	22.477
Tracy, about 0.3 mile east of Southern Pacific R. R. station, 2 meters north of milepole 71, 0.3 meter south of line fence, on right of way of Southern Pacific R. R.; Geological Survey iron post stamped "53.927" (U. S. C. & G. S. b. m. S–8)	54.150
Tracy, 150 meters east of Southern Pacific R. R. station, in top surface of southwest concrete pillar under water tank; red metal disk (U. S. C. & G. S. b. m. R–8)	60.177
Tracy, 75 meters west of Southern Pacific R. R. station, in north face of northwest concrete pillar under water tank; red metal disk (U. S. C. & G. S. b. m. Q–8)	59.147
Tracy, 10 meters along the track east of milepole 68, on Southern Pacific R. R. right of way, 1 meter from south line fence, about 1 meter below track; Geological Survey iron post stamped "102.656" (U. S. C. & G. S. C. b. m. P–8)	102.962

Primary leveling by L. F. Biggs in 1919

From point 2.5 miles south of Tracy northwest along Southern Pacific R. R. to Tracy (leveled several times)

Tracy, 2.5 miles southeast of, 100 feet north of Northern Pacific Ry. crossing; iron post stamped "78 Cal 1909 C"	77.579
Highway milepost 84 (formerly 85); spike, marked "U. S. 70 B. M." (Monahan b. m)	69.55
Tracy, about 0.3 mile east of Southern Pacific R. R. station, 2 meters north of milepost 71, 0.3 meter south of line fence on right of way of Southern Pacific R. R.; iron post stamped "53.927" (U. S. C. & G. S. b. m. S–8)	54.150
Tracy, 150 meters east of Southern Pacific R. R. station, in top surface of southwest concrete pillar under water tank; disk (U. S. C. & G. S. b. m. R–8)	60.177
Tracy, 75 meters west of Southern Pacific R. R. station, in north face of northwest concrete pillar under water tank; disk (U. S. C. & G. S. b. m. Q–8)	59.147

From Tracy northwest along Southern Pacific R. R. to Bethany

	Feet
Tracy, 1.5 miles northwest of, east side of highway, south end of concrete highway culvert 80 B. C. at railroad crossing; chiseled square, marked "U. S. 40"	40.25

Primary leveling by L. F. Biggs in 1919

Along highways in southern part of quadrangles

T. 3 S., Rs. 5 and 6 E., corner of secs. 25, 36, 30, and 31, east side of road, at road east, in corner fence post; spike, marked "U. S. 204"	204.10
T. 3 S., Rs. 5 and 6 E., corner of secs. 24, 25, 19, and 30, east side of road, at road east, in gatepost; spike painted "U. S. 138"	137.25
T. 3 S., Rs. 5 and 6 E., corner of secs. 13, 24, 18, and 19, at crossroads, in corner fence post; spike, painted "U. S. 102"	101.48
T. 3 S., R. 5 E., corner of secs. 14, 23, 13, and 24, in corner fence post; spike, painted "U. S. 112"	112.13
Tracy, 4.5 miles south by 1.5 miles east of, at crossroads; iron post stamped "140 1910 6"	139.928
Ripon, 7 miles due west of, at T end of road, 12 feet east of fence corner, at southeast corner of intersection; iron post stamped "23 1912"	23.668
Ripon, 7 miles west by 1.2 miles south of, 2.6 miles south of Rustis School, left of gate at entrance to McMullen's upper ranch house; spike in base of post, scribed "U. S. 25 B. M."	25.20
Ripon, 7 miles west by 2 miles south of, northeast corner of wooden abutment of approach to bridge over ravine; spike, scribed "U. S. 30 B. M."	30.53
San Joaquin bridge, 1.6 miles northeast of, first wooden bridge north of; spike in wooden support, scribed "U. S. 31 B. M."	31.33
San Joaquin bridge, 1.3 miles northeast of, 7 miles west by 4 miles south of Ripon, southeast corner of steel bridge over Red Bridge Slough, in concrete abutment; aluminum tablet stamped "30 1912"	30.761
San Joaquin City, near, at northwest corner of steel bridge over San Joaquin River, in end of cap; spike, scribed "U. S. 34 B. M."	33.97
Elevation of floor of bridge	35.7

Primary leveling by L. F. Biggs in 1919

Near Hospital Canyon

Hospital Canyon, 2.4 miles west of mouth, south of road, at point just above inclining of canyon; iron post stamped "489 1919 B 11"	488.584

Near Ingram Canyon

T. 5 S., R. 6 E., sec. 9, Ingram Canyon, 50 feet west of mouth of Spring Canyon; iron post stamped "671 B 1919 B 9"	670.951
Ingram Canyon, 1 mile northwest of mouth of Spring Canyon, northeast of road, in root of 24-inch oak tree scribed "U. S. 813"; nail	813.01
Ingram Canyon, 1.7 miles northwest of Spring Canyon, 50 feet north of road forks; summit of boulder, chiseled "U. S. 876"	875.92

CROWS LANDING QUADRANGLE

[Latitude 37° 22′ 30″–37° 30′; longitude 121°–121° 07′ 30″]

STANISLAUS COUNTY

Primary leveling by U. S. Corps of Engineers in San Joaquin Valley in 1913–14

	Feet
T. 6 S., R. 9 E., about 1,600 feet west of northeast corner of sec. 17, 60 feet northeast of bank of river, about 900 feet above mouth of Orestimba Creek, at beginning of curve of levee to right facing downstream, 1.5-foot blazed white-oak tree bears S. 86° W. 102 feet; 2-foot blazed white oak bears S. 61° E. 8 feet; 3-foot blazed white oak bears N. 30° E. 275 feet; iron post set in concrete (U. S. C. E. b. m. 412)	60.96
Crows Landing bridge, at retaining wall at west end of, on upstream side, between bridge tender's house and roadway; iron post set in concrete (U. S. C. E. b. m. 413)	62.57
Crows Landing bridge, 1,300 feet northwest of branch in road which is 500 feet northeast of, 18.5 feet southwest of fence line along road, 150 feet northeast of river bottom bank, about 1,000 feet northwest of southeast corner of sec. 6, T. 6 S., R. 9 E.; iron post set in concrete (U. S. C. E. b. m. 414)	58.59
Crows Landing bridge, 1.1 miles northwest of, 1,300 feet southwest of first bend in road on east side of river after it leaves main Crows Landing Road, on northeast bank of slough, about 1,600 feet north of its inlet, 650 feet north of sharp bend of east bank of slough; iron post set in concrete (U. S. C. E. b. m. 415)	56.45
T. 5 S., R. 9 E., about 2,200 feet north and 600 feet east of southwest corner of sec. 21, 700 feet southeast of house, 200 feet west of west fence line of road on bank of river bottom, 30 feet north of 4-foot blazed oak tree; iron post set in concrete (U. S. C. E. b. m. 416)	56.17
T. 5 S., R. 8 E., 2,000 feet west and 1,000 feet north of southeast corner of sec. 25, 200 feet northeast of river bank, 3-foot blazed white oak bears S. 40° W. 75 feet; another 3-foot blazed white oak bears S. 40° E. 100 feet; 600 feet east of house; iron post set in concrete (U. S. C. E. b. m. 417)	54.89
T. 5 S., R. 8 E., about 700 feet south and 150 feet west of northeast corner of sec. 26, 100 feet east of river bank, 1,000 feet upstream from outlet near lagoon, 500 feet downstream from mouth of wide slough, tree bears W. 25 feet, another tree bears S. 34° E. 95 feet; iron post set in concrete (U. S. C. E. b. m. 418)	52.00
Patterson, 3.5 miles east of, 1.1 miles above Patterson pump, 2,600 feet south and 300 feet west of northeast corner of sec. 22, T. 5 S., R. 8 E., 140 feet east of east river bank, about 400 feet south of house, a tree bears N. 5° E. 170 feet, another tree is W. 30 feet, another S. 25° E. 50 feet; iron post set in concrete (U. S. C. E. b. m. 419)	51.06
Patterson pump, 75 feet north of west corner of pump house; iron post set in concrete (U. S. C. E. b. m. 420)	54.74

GILROY HOT SPRINGS QUADRANGLE

[Latitude 37°–37° 15′; longitude 121° 15′–121° 30′]

SANTA CLARA AND STANISLAUS COUNTIES

Primary leveling by L. F. Biggs in 1917

From south border of quadrangle along highways across southeast quarter of quadrangle

	Feet
Bell station, 4.7 miles southwest of, west edge of road, at angle in road; iron post stamped "285 1917 3"	285.204
Bell station, 3.3 miles southwest of, north edge of road, in base of 42-inch oak tree scribed "U. S. 295"; copper nail	295.03
Bell station, 2.3 miles southwest of, south side of road, in base of 30-inch oak tree scribed "U. S. 319"; railroad spike (Highway b. m. 319.49)	318.96
Bell station, 0.9 mile southwest of, east of creek, north of road; copper nail in base of 24-inch sycamore tree scribed "U. S. 331"	331.87
Bell station, 100 feet east of hotel, north edge of road; iron post stamped "352 4 1917"	352.123
Bell station, 1.3 miles northeast of, north edge of road, in base of 42-inch oak tree scribed "U. S. 379"; railroad spike	379.72
Bell station, 2.3 miles northeast of, west edge of road near foot of grade, in base of 30-inch oak tree scribed "U. S. 431"; nail	431.43
Bell station, 3.8 miles northeast of, east side of road, in base of 18-inch white-oak tree scribed "U. S. 696"; copper nail	697.07
Bell station, 5 miles northeast of, 3.8 miles southwest of Pacheco Pass, 30 feet north of road, under live-oak tree; iron post stamped "978 5 1917"	979.049
Pacheco Pass, 2.3 miles southwest of, south edge of road near creek crossing, in base of 18-inch live-oak tree scribed "U. S. 1,082"; copper nail	1,082.74
Pacheco Pass, 1.2 miles southwest of, south edge of road at stream crossing, in base of 24-inch oak tree scribed "U. S. 1,180"; nail	1,180.41

From point east of Gilroy north along highways to Gilroy Hot Springs (leveled twice)

Gilroy, 5.4 miles east of, west edge of road near foot of grade, in base of 24-inch sycamore tree scribed "U. S. 290"; copper nail	290.37
Gilroy, 7.4 miles east of, 500 feet north of ranch house, near corner of picket fence; top of rock, "U. S. 739" marked on picket fence	739.08
Gilroy, 8.4 miles east of, 1 mile east of ranch house, north edge of road at top of first summit; aluminum tablet in boulder, stamped "1,088 11 1917"	1,088.020
Gilroy, 9.5 miles east of, 6.8 miles south of Gilroy Hot Springs, west of road, in base of frame of water tank, painted "U. S. 1,062"; copper nail	1,062.18
Gilroy Hot Springs, 5.7 miles south of, south edge of road at T road north; iron post stamped "984 12 1917"	983.643
Gilroy Hot Springs, 4.9 miles south of, east side of road, in base of 18-inch white-oak tree scribed "U. S. 961"; copper nail	960.93
Gilroy Hot Springs, 4 miles south of, at north end of small valley, east side of road, in base of 30-inch black-oak tree scribed "U. S. 872"; copper nail	871.55

	Feet
Gilroy Hot Springs, 3.5 miles south of, top of railing on west edge of bridge; copper nail and washer, painted "U. S. 840"	839.62
Gilroy Hot Springs, 3 miles south of, west edge of road, opposite gate to road leading up Hunting Hollow; iron post stamped "852 1917 13"	852.019
Gilroy Hot Springs, 1.6 miles south of, west end of culvert; copper nail, painted "U. S. 887"	886.56
Gilroy Hot Springs, 0.6 mile south of, east end of north concrete abutment of highway bridge; chiseled square, marked "U. S. 932"	932.29
Gilroy Hot Springs, 50 feet northwest of hotel, in base of 18-inch locust tree; copper nail, aluminum tag stamped "1189"	1,191.81
Gilroy Hot Springs, 500 feet southeast of hotel, 60 feet east of road, in top of rock ledge; aluminum tablet stamped "1,133 1918"	1,132.800

From point 3 miles south of Gilroy Hot Springs northeast along highways to Batcher triangulation station (leveled twice)

Batcher triangulation station, 2.5 miles southeast of, 400 feet north of windmill on Melias place, at corner of corral, in base of 24-inch oak tree scribed "U. S. 898"; copper nail	397.39
Point on rock under tree	1,997.16
Batcher triangulation station; aluminum tablet stamped "2,651"	2,650.880

HOLT, LATHROP, STOCKTON, AND UNION ISLAND QUADRANGLES

[Latitude 37° 45′–38°; longitude 121° 15′–121° 30′]

SAN JOAQUIN COUNTY

Primary leveling by L. F. Biggs in 1910

From Banta west and north to Grant Line bridge, thence southwest to point 0.8 mile south of pump house

	Feet
Banta, 1 mile west of, north side of road, in base of telephone pole 42–9; spike with aluminum tag stamped "31"	31.73
Banta, 1.5 miles west of, at T road south, in base of telephone pole 41–29; spike with aluminum tag stamped "33"	33.44
Banta, 3 miles west of, at T road south to Tracy, in base of telephone pole 40–12; spike with aluminum tag stamped "27"	27.72
Banta, 3.5 miles west of, at T road north; in base of telephone pole 39–31; spike with aluminum tag stamped "27"	27.31
Tracy, 2 miles north of, 600 feet north of Bagley's ranch house, east of road, at fence corner; iron post stamped "9, 1910, 1"	9.871
T. 1 S., R. 5 E., corner of secs. 5, 9, 4, and 8, in base of post; spike with aluminum tag stamped "5"	5.51
Tracy, 3.5 miles north of, 1 mile south of Naylee School, where road turns north, in root of poplar tree; copper nail with aluminum tag stamped "7"	7.29
Tracy, 4.5 miles north of, 50 feet north of Naylee School, 200 feet south of Old River steel bridge, west side of road; iron post stamped "11, 1910, 2"	11.849
Grant Line steel bridge, on southeast corner of abutment; chisel point, painted "18"	18.43
Grant Line steel bridge; 22.5-foot mark on gage	14.81

	Feet
Grant Line steel bridge, 2.5 miles west of, 175 feet south of levee, 150 feet south of pump house, on fence line; iron post stamped "2, 1910, 3"	2.124
From Grant Line bridge north and east to Stockton	
Grant Line bridge, 2.5 miles north of, south side of road, where road crosses levee; iron post stamped "2, 1910, 10"	1.889
Grant Line bridge, 2 miles north by 1 mile east of, north side of road; spike in base of corner fence post, aluminum tag stamped "3"	3.32
Bridge over Middle River, 200 feet east of, at T road north; iron post stamped "6, 1910, 11"	6.003
Middle River; surface of water under bridge November 2, 1910	0.54
Middle River bridge, 2.3 miles east of, 0.6 mile south of Fairchild School, at T road south; spike in base of telephone pole, marked "6"	6.18
Fairchild School, 1.2 miles north of, 2.5 miles southwest of San Joaquin bridge, opposite road house; iron post stamped "2, 1910"	1.860
San Joaquin River; surface of water under bridge November 2, 1910	0.5
Ganwood Bridge over San Joaquin River, 60 feet east of, north side of road, at fence line; iron post stamped "7, 1910"	7.556
Stockton, 2 miles south of, at junction of French Camp and Roberts Island roads, west levee of canal; spike in base of telephone pole, aluminum tag stamped "16"	15.77
Stockton, south edge of town, junction of South Center and East Jackson streets; spike in base of telephone pole, aluminum tag stamped "13"	12.86
Stockton, San Joaquin County courthouse, west door of north entrance, in angle of wall; bronze tablet stamped "18 B"	18.353
From Holt along road north to Black Slough landing (unchecked spur line)	
Holt, 300 feet west of station, south edge of right of way, east edge of road leading south; iron post stamped "10, 1910, 15"	10.335
Black Slough landing, south of, southwest corner of bridge over canal; top of bolt, painted "—3" (below sea level)	—1.00
Black Slough landing, 90 feet northeast of Gorden's house, on edge of levee, San Joaquin River; brass-capped pipe marked "U. S. E. D. No. 206"	11.727
From Middle River west and north along road to Holt	
Kingston School, 300 feet northeast of building, at angle of road to north, west side of road at fence line; iron post stamped "7, 1910, 14"	6.822
Stockton, 5.8 miles west of, 200 feet east of milepost 1127, on levee, at fence corner; iron post stamped "9"	9.205
From point 1.5 miles north of Stockton west to U. S. Corps of Engineers[1] bench mark 0.2 mile east of Shipyard Island (checked spur line)	
Stockton, 1.5 miles north of, 8 feet north of milepost 94, east side of track, near fence line; iron post stamped "20 B" U. S. C. of E. value 23.388	20.575

[1] Locally known as U. S. Engineer Department.

	Feet
Stockton, 2 miles north of, southwest abutment of bridge over Calaveras River; top of bolthead, marked "27"	27.31
Western Pacific R. R. crossing; top of rail	29.0
Stockton, 2 miles north of, on lower Sacramento road, 6 feet south of southeast abutment of bridge over Calaveras River; copper bolt in cap with aluminum tag stamped "19"	19.862
Lower Sacramento road bridge, 1.2 miles west of, north levee of canal, 200 feet southwest of fence corner, in stump; copper nail with aluminum tag stamped "20"	20.790
Lower Sacramento road bridge, 2.5 miles west of, north edge of levee, at northeast corner of house at Smith's place; iron post stamped "3"	3.872
Smith's house, 1 mile west of; spike in base of power pole 5–15, aluminum tag stamped "—1" (below sea level)	—0.646
Elmwood farm No. 2, 800 feet east of barn; spike in base of power pole 6–7, aluminum tag stamped "2"	2.183
Shipyard Island, 0.5 mile east of, east bank of San Joaquin River, at pumping station, in top of a pile; copper bolt with aluminum tag stamped "8"	8.807
Shipyard Island, 0.2 mile east of, right bank of San Joaquin River, 40 feet back of levee, midway between house and barn; iron post marked "U. S. E. D. No. 205" (U. S. C. E. value 4.770)	1.496

From point 2.5 miles north of Grant Line bridge to Camp No. 1 landing

Banta, 10 feet north of milepost 75, south side of track; iron post stamped "22.181" (recovered by U. S. Coast and Geodetic Survey)	22.477
Victoria Island, 0.5 mile east of, 40 feet south of Middle River levee, 5 feet south of red tank house; iron post stamped "4, 1910, 17"	4.662
Camp No. 1 landing, on top of levee, 50 feet north of barn, in top of snubbing post; copper nail with aluminum tag stamped "16"	16.76

From point 2.3 miles east of Middle River southeast to French Camp

Brant bridge, south end abutment of, aluminum tablet stamped "21 1910, 30"	21.039
Brant bridge, 1.2 miles east of, at T road south, in telephone pole; spike with aluminum tag stamped "11"	11.32
French Camp, 1.3 miles south of, east side of road at T road west, in base of locust tree; spike with aluminum tag stamped "18"	17.67
French Camp, 2.1 miles south of, on east side of railroad at road crossing, 200 feet south of milepost 85; iron post stamped "19 B 1901"	19.371

Precise leveling by U. S. Coast and Geodetic Survey

Near Lathrop

Lathrop, 40 meters south along the track from Southern Pacific R. R. milepole 84, 0.6 meter south of north highway fence at crossing, 11.5 meters east of Southern Pacific northbound track; Geological Survey iron post stamped "19 B" (U. S. C. & G. S. b. m. Y–8)	19.357

	Feet
Lathrop, 100 meters north of Southern Pacific R. R. station, in southeast pillar of water tank; red metal disk (U. S. C. & G. S. b. m. X–8)	22.539
Lathrop, about 75 meters north of Southern Pacific R. R. station, west of tracks, at fence line, 15 meters south of water tank; Geological Survey iron post stamped "20 B" (U. S. C. & G. S. b. m. W–8)	20.321
Lathrop, at railroad mileage 78.1, at west end of viaduct leading to west end of Southern Pacific R. R. bridge 78 B over San Joaquin River, on the top surface of the bearing stone of northwest pier, about 1.8 meters below top of rail; red metal disk (U. S. C. & G. S. b. m. V–8)	27.215
Banta, 1 mile northeast of, in top surface of east abutment to Southern Pacific R. R. bridge 74C, south of the track; red metal disk (U. S. C. & G.S. b. m. U–8)	20.492

Primary leveling by L. F. Biggs in 1919

From Tracy northwest along Southern Pacific R. R.

Tracy, 4 miles northwest of, at angle in highway westward to Altamont Pass; west end of concrete highway culvert; chiseled "U. S. 27"	27.52

HOWARD RANCH QUADRANGLE

[Latitude 37° 07′ 30″–37° 15′; longitude 121°–121° 07′ 30″]

MERCED COUNTY

Primary leveling by Roscoe Reeves in 1916

From point near Gustine along highways west and south to south border of quadrangle

	Feet
Gustine, 2 miles south of, 1 mile west of railroad crossing, 100 feet northwest of bridge over canal, in telephone pole; spike, painted "111"	111.85
Gustine, 2 miles south of, T. 8 S., R. 9 E., southwest corner of sec. 17, 1,500 feet east of crossroads, 75 feet west of canal, on north side of road, inside of fence; iron post stamped "111"	111.318
Gustine, T. 8 S., R. 9 E., southeast corner of sec. 18, northwest corner of crossroads, in telephone pole; spike painted "113"	113.81
T. 8 S., R. 8 E., at northeast corner of sec. 24, 100 feet south of T road east, on west side of road, in telephone pole; spike, painted "128"	128.06
T. 8 S., R. 8 E., northeast corner of S. E. ¼ sec. 24, at southwest corner of T road west, in fence post; spike, painted "131"	131.25
T. 8 S., R. 8 E., northwest corner of S. W. ¼ sec. 24, in corner fence post; spike, painted "145"	145.87
T. 8 S., R. 8 E., 150 feet south of southeast corner of N. E. ¼ sec. 22, west side of road, in gate post; spike, painted "165"	165.25
T. 8 S., R. 8 E., 150 feet south of quarter corner on east side of sec. 22, 3 feet south of gatepost on west side of road; iron post stamped "165"	165.991
T. 8 S., R. 8 E., southeast corner of sec. 27, in northwest corner of crossroads, in telephone pole; spike, painted "170"	170.29
T. 8 S., R. 8 E., southwest corner of sec. 35, in northeast corner of L road north and east, in fence post; spike, painted "190"	190.49

	Feet
T. 9 S., R. 8 E., 5 telephone poles north of center of sec. 2, in pole 87–11; spike, painted "173"	173.73
T. 9 S., R. 8 E., 500 feet south of center of sec. 2, in corner fence post; spike, painted "161"	161.56
T. 9 S., R. 8 E., quarter corner on east side of sec. 2, 20 feet north of ditch, east side of road; iron post stamped "146"	146.745
T. 9 S., R. 8 E., 0.05 mile north of quarter corner between secs. 10 and 11, in bottom of draw, in fence post; spike, painted "247"	247.43
Howard ranch, in gate post to main entrance from road; spike, painted "285"	285.46
T. 9 S., R. 8 E., NW. ¼ sec. 15, at entrance gate from the east to Howard ranch buildings, 15 feet east of gate; iron post stamped "285"	284.998
Howard ranch, 0.8 mile southwest of, on road to the San Luis ranch, at forks of road, in north gate post; spike, painted "317"	317.45
Howard ranch, 1.6 miles southwest of, east side of road; point of rock, painted "316"	316.29

MANTECA QUADRANGLE

[Latitude 37° 45′–37° 52′ 30″; longitude 121° 07′ 30″–121° 15′]

SAN JOAQUIN COUNTY

Primary leveling by G. L. Hagman in 1911

From French Camp to Castle School

	Feet
French Camp, 2.1 miles southeast of, at T road south, 50 feet southeast of, in base of telephone pole; spike, aluminum tag stamped "26.66"	26.18
French Camp, 3.2 miles southeast of, northeast corner of crossroads; iron post stamped "32 B 1911"	32.710
French Camp, 4.2 miles southeast of, on south side of road, 150 feet west of Castle ranch, in base of telephone pole; spike, aluminum tag stamped "36.67"	36.25
Castle School, 0.6 mile southeast of, southeast corner of crossroads, in base of telephone pole; spike, aluminum tag stamped "41.68"	41.37
Castle School, 1.6 miles northeast of, on west side of road, in base of fence post; spike, aluminum tag stamped "40.69"	40.20
Castle School, 2.1 miles northeast of, at private T road east to Lynch ranch, on west side of road, 8 feet south of gatepost; iron post stamped "42 B 1911"	42.059

Near Ripon

Ripon, 4.6 miles north of, 0.5 mile west of Atlanta, southwest corner of road forks; iron post stamped "59 B 1911"	58.377

MORGAN HILL QUADRANGLE

[Latitude 37°–37° 15′; longitude 121° 30′–121° 45′]

SANTA CLARA COUNTY

Precise leveling by U. S. Coast and Geodetic Survey

Along Southern Pacific R. R.

	Feet
Coyote, 3 miles south of, 30 feet east of milepost 66, west of road, 150 feet north of railroad crossing; G. S. iron post stamped "S. F. 300 1908 6" (U. S. C. & G. S. b. m. Q–19)	300.784

	Feet
Coyote, 6 miles south of, east of track, 20 feet east of milepost 69, 100 feet west of Madrone post office; G. S. iron post stamped "S. F. 344 1908 7" (U. S. C. & G. S. b. m. H–20)	344.127
Morgan Hill, 1.0 mile south of, set in south end of Southern Pacific R. R. culvert 69 D, on west side of track; red metal disk (U. S. C. & G. S. b. m. R–19)	350.970
Morgan Hill, 1.3 miles south of, east of track, 10 feet south of milepost 72; G. S. iron post stamped "S. F. 332 1908 8" (U. S. C. & G. S. b. m. S–19)	332.670
San Martin, 0.7 mile north of, mileage 73.9, 15 meters west of track, on highway bridge, in top face of south end post of railing on east side of roadway; red metal disk (U. S. C. & G. S. b. m. T–19)	312.693
Morgan Hill, 4.3 miles south of, 10 feet east of milepost 75, 500 feet east of Martin School building; G. S. iron post stamped "S. F. 280 1908 9" (U. S. C. & G. S. b. m. U–19)	279.803
San Martin, 2 miles south of, at mileage 76.6, on east end of Southern Pacific R. R. culvert 76 C, on east side of track; red metal disk (U. S. C. & G. S. b. m. V–19)	248.592
Gilroy, 2.8 miles north of, at mileage 77.9, 6 feet south of milepost 78, 50 feet south of private-road crossing; iron post stamped "S. F. 224 1908 10" (U. S. C. & G. S. b. m. W–19)	224.603
Gilroy, at north edge of town, at mileage 79.8, set in north end of east banister of highway culvert, bridge is about 60 meters west of track, opposite railroad wood trestle; red metal disk (U. S. C. & G. S. b. m. X–19)	200.879

Primary leveling by B. A. Jenkins in 1908

From milepost 61, near Pomar, southeast along Southern Pacific R. R. to Gilroy

San Jose, 12.5 miles south of, 0.2 mile north of Coyote, 150 feet south of road crossing, opposite milepost 63, west of track; iron post stamped "S. F. 253 1908 5" (U. S. C. & G. S. b. m. O 19)	253.520
Coyote, in front of station; top of rail	254.9
Coyote, 3 miles south of, 30 feet east of milepost 66, west of road, 150 feet north of railroad crossing; iron post stamped "S. F. 300 1908 6" (U. S. C. & G. S. b. m. Q 19)	300.784
Coyote, 6 miles south of, east of track, 20 feet east of milepost 69, 100 feet west of Madrone post office; iron post stamped "S. F. 344 1908 7" (U. S. C. & G. S. b. m. H 20)	344.127
Madrone, in front of station; top of rail	347.8
Morgan Hill, in front of station; top of rail	348.5
Morgan Hill, 1.3 miles south of, east of track, 10 feet south of milepost 72; iron post stamped "S. F. 332 1908 8" (U. S. C. & G. S. b. m. S 19)	332.670
Tennant, in front of station; top of rail	331.3
San Martin, in front of station; top of rail	287.9
Morgan Hill, 4.3 miles south of, east of road, 10 feet east of milepost 75, 500 feet south of Martin School building; iron post stamped "S. F. 280 1908 9" (U. S. C. & G. S. b. m. V 19)	279.803
Rucker, in front of station; top of rail	242.3
Gilroy, 2.8 miles north of, 6 feet south of milepost 78, 50 feet south of private-road crossing; iron post stamped "S. F. 224 1908 10" (U. S. C. & G. S. b. m. W 19)	224.603

	Feet
Gilroy, in southeast corner of city hall; aluminum tablet stamped "S. F. 190 1908 11"	200.110
Gilroy, 50 feet east of track of Southern Pacific R. R., 472 feet south of station; iron post stamped "S. F. 197 1908 12" (U. S. C. & G. S. b. m. J 20)	196.640
Gilroy, in front of station; top of rail	196.8

Primary leveling by B. A. Jenkins in 1908 aud L. F. Biggs in 1917

From point south of Gilroy to Gilroy, correcting data in Bulletin 481

Gilroy, 3.2 miles south of, 80 feet south of milepost 84; iron post stamped "S. F. 167 1908 13" (Bull. 481, p. 68, +0.315). Recovered by the U. S. C. & G. S. in 1920 as J 20)	166.968
Gilroy, 50 feet east of track of Southern Pacific R. R., 472 feet south of station; iron post stamped "S. F. 197 1908" (U. S. C. & G. S. b. m. S. 20)	196.640
Gilroy, in southeast corner of city hall; aluminum tablet stamped "S. F. 200 1908" (Bull. 481, p. 68, +0.147)	200.110

Primary leveling by L. F. Biggs in 1917

From Gilroy east to point near southeast corner of quadrangle

Gilroy, in front of city hall, flush with sidewalk; brass plate set in concrete block, stamped (City of Gilroy, b. m. City elev.=198.77)	197.656
Gilroy, 1.6 miles east of, south edge of road, in base of frame of road tank; copper nail and washer, painted "U. S. 179"	179.17
Gilroy, 3 miles east of, 0.6 mile northeast of old Gilroy, on west side of concrete highway bridge; aluminum tablet stamped "10 1917 171"	171.616
Gilroy, 4 miles east of, at T road north, opposite large water tank, in base of stump scribed "U. S. 197"; copper nail,	197.66

MOUNT BOARDMAN QUADRANGLE

[Latitude 37° 15′–37° 30′; longitude 121° 15′–121° 30′]

STANISLAUS COUNTY

Primary leveling by L. F. Biggs in 1919

From Vanormer west along highways near north border of quadrangle

	Feet
Mouth of Del Puerto Canyon, 3.6 miles west of, 40 feet north of road, in sandstone ledge; chiseled "U. S. 418 B. M."	418.20
Mouth of Del Puerto Canyon, 4.8 miles west of, 30 feet south of road, 30 feet north of track; chiseled point on boulder, painted "U. S. 487"	487.01
Mouth of Del Puerto Canyon, 6 miles west of, 2 miles east of Canyon School, 20 feet north of road, at Tryans sheep ranch, in summit of boulder; bronze tablet stamped "548 1919 B B 3"	547.438
Canyon School, 0.9 mile east of, 20 feet north of railroad water tank; summit of boulder chiseled "U. S. 607"	607.02
Canyon School, 60 feet south of, 10 feet north of track; summit of boulder chiseled "U. S. 645"	645.24
Canyon School, about 1.5 miles north of, 15 feet west of trail; summit of small saddle, chiseled "U. S. 1359"	1,359.13

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	Feet
Canyon School, about 2 miles north of, 30 feet west of trail, in first saddle; chiseled point on rock ledge, painted "1,430"	1,430.04
Summit of main saddle, in trail	1,423.9
Summit of saddle between Del Puerto and Ingram Canyons, 0.1 mile north of, 100 feet north of road; in large boulder, painted "U. S. 1,361"	1,361.47
Summit of divide between Del Puerto and Ingram Canyons, 0.5 mile north of, 0.4 mile north of Malay ranch house, on summit of small butte; bronze tablet in ledge, stamped "1,254 1919 B B 8"	1,254.127

From Canyon School west along highways to Red Mountain (leveled twice)

Canyon School, 60 feet south of, 10 feet north of track, in summit of boulder; chiseled "U. S. 645"	645.24
Canyon Schoool, 1.2 miles west of, 60 feet south of road, in base of 24-inch oak tree scribed "U. S. 698"; nail	698.40
The Narrows, south end of west concrete abutment of railroad bridge; bronze tablet stamped "733 1919 B B 4"	733.36
Silica siding, south edge of road; summit of boulder, chiseled "U. S. 776"	775.69
Silica siding, 1.2 miles west of, south side of track, 200 feet west of railroad crossing; summit of boulder, chiseled "U. S. 936"	936.06
Top of rail at road crossing	1,006.3
Magnesia, south side of track, at west end of switch, in base of 18-inch oak tree, scribed "U. S. 984"; nail	983.69
Magnesia, 1 mile west of, 10 feet south of track, in base of 18-inch oak tree scribed "U. S. 1,029"; spike	1,028.66
Magnesia, 2 miles west of, 6 feet south of track, at point, in ledge; bronze tablet stamped "1,075 1919 B B 5"	1,075.148
Magnesia, 3 miles west of, 20 feet south of track, opposite Deer Park Canyon, in base of 24-inch oak tree, scribed "U. S. 1,135"; nail	1,135.22
Jones Camp, 2.5 miles northeast of, opposite field; south end of iron culvert, painted "U. S. 1,240"	1,240.01
Jones Camp, 1.5 miles northeast of, at mouth of Adobe Canyon, south end of trestle, painted "U. S. 1,318"; nail	1,319.37
Jones Camp, 0.4 mile northeast of, south edge of track, opposite Hideout Canyon, at ore-loading platform; summit of rock, painted "U. S. 1,518"	1,517.92
Jones Camp, north edge of stream, 15 feet south of cook house, in summit of large boulder; bronze tablet stamped "1611 B B 1919 6"	1,611.468
Jones Camp, 0.3 mile southwest of, at forks of trail, in base of 24-inch oak tree, scribed "U. S. 1,887"	1,887.39
Phoenix Mill, 400 feet west of retort, 400 feet east of office, 20 feet south of road; summit of boulder chiseled "U. S. 2,101"	2,100.91
Red Mountain, 1.0 mile southwest of, 0.5 mile west of Phoenix Mill, 200 feet east of trail saddle, 30 feet south of trail, near old prospect hole, in summit of boulder; bronze tablet stamped "2,363 7 B B 1919"	2,363.409
Red Mountain, 0.5 mile southwest of, 0.8 mile west of Phoenix Mill, 0.4 mile north of trail saddle on summit of hill, in base of small oak tree with flag, scribed "U. S. 2,925"; spike	2,924.83

Near Malaly ranch house

Malaly ranch house, 0.2 mile west of, on top of ridge, in base of oak tree, painted "U. S. 1142"; spike	1,141.60

	Feet
Malaly ranch house, 0.8 mile northwest of, 30 feet north of trail, at top of steep grade, in base of 24-inch oak tree, scribed "U. S. 1,119"; nail	1,118.98
Malaly ranch house, 1.1 miles northwest of, in Spring Canyon, at junction of trail and road, in base of 24-inch oak tree, scribed "U. S. 816"; nail	815.80

MOUNT DIABLO QUADRANGLE

[Latitude 37° 45′–38°; longitude 121° 45′–122°]

CONTRA COSTA COUNTY

Primary leveling by J. A. Vogleson in 1896

From Antioch southeast along Southern Pacific R. R. to Neroly siding

	Feet
Neroly siding, county road just north of, gate to private-road crossing, first panel east of gate; iron post stamped "79"	78.923

From point near Brentwood west up Marsh Creek to Morgan Territory, thence northwest via Clayton to Concord

Morgan Territory, in school yard, 55 feet east of northeast corner of schoolhouse; iron post stamped "766"	765.805
Marsh Creek and Mount Diablo Creek, divide between, just east of gate; iron post stamped "955"	955.069
Clayton, intersection of Nortonville and Marsh Creek roads with Main St., near guidepost; iron post stamped "395"	395.105

From boundary of Contra Costa and Alameda counties northwest to Danville

Danville, south of station; railroad track	370.5
Danville, in brick foundation of schoolhouse; bronze tablet stamped "365"	364.495

NEW ALMADEN QUADRANGLE

[Latitude 37°–37° 15′; longitude 121° 45′–122°]

SANTA CLARA AND SANTA CRUZ COUNTIES

Primary leveling by B. A. Jenkins in 1908 and C. C. Wood in 1899

From point 3.6 miles southeast of San Jose to milepost 61

	Feet
San Jose, 9.7 miles southeast of, 800 feet south of milepost 60, 50 feet north of road to Mrs. L. Little's ranch house where it crosses railroad, at west edge of wagon road; iron post stamped "S. F. 199 1908 4" (C. & G. S. b. m. L 19)	198.983
Pomar, in front of station; top of rail	205.3

From point near Zeyante north to point 1 mile north of Los Gatos

Glenwood, 1.4 miles southwest of, at northwest corner of tunnel 4, in wing; aluminum tablet stamped "S. F. 787 1908 B. O."	786.985
Glenwood, in front of station; top of rail	888.96
Laurel, in front of station; top of rail	899.3
Wrights, 1.4 miles southwest of, at west end of tunnel 2, in wing; aluminum tablet stamped "S. F. 902 1908 31"	901.151
Wrights, 0.2 mile west of station, at northeast end of tunnel 2, in wing; aluminum tablet stamped "S. F. 898 1908 32"	897.847

	Feet
Aldercroft, 300 feet south of, on northeast corner of cement culvert 60–A; chiseled circle painted "U. S. 731 B. M. No. 61"	730.45
Alma, 0.8 mile southwest of, 400 feet south of private-road crossing, west of railroad, in boulder; aluminum tablet stamped "S. F. 621 1908 B. 3" (not found in 1916)	620.944
Alma, 0.6 mile northeast of, opposite Lexington, in cement culvert; aluminum tablet stamped "S. F. 535 1908 34" (not found in 1916)	534.652
Los Gatos, 1.1 miles southwest of, cement culvert; chiseled circle painted "U. S. 428 B. M. No. 64" (not found in 1916)	427.76
Los Gatos, opposite station, in east corner of yard around Hotel Lindon, on Santa Cruz Ave.; iron post stamped "S. F. 412"	411.789

ORESTIMBA QUADRANGLE, COMPRISING CROWS LANDING, NEWMAN, ORESTIMBA CREEK, AND PATTERSON 7½′ QUADRANGLES

[Latitude 37° 15′–37° 30′; longitude 121°–121° 15′]

MERCED AND STANISLAUS COUNTIES

Primary leveling by W. H. Monahan in 1908

From point 1.4 miles north of Gustine along Southern Pacific R. R. via Newman and Crows Landing to Patterson

	Feet
Newman, south end of station, 10 feet west of track, 5 feet east of telegraph pole; iron post stamped "88 Cal 1909 G"	87.757
Newman, in front of station; top of rail, marked "89"	88.3
Newman, 4.4 miles north of, 5 feet north of telegraph milepost 116, 25 feet east of track; iron post stamped "104 Cal 1909 G"	103.574
Crows Landing, 125 feet east of station, 300 feet south of telegraph milepost 114; iron post stamped "111 Cal 1909 G"	111.115
Crows Landing, in front of station; top of rail, marked "111"	112.5
Crows Landing, 3 miles north of, 10 feet north of telegraph milepost 111, 25 feet east of track; iron post stamped "114 Cal 1909 G"	113.281
Patterson, in front of station; top of rail, marked "103"	102.8
Patterson, 25 feet east of track, 5 feet north of telegraph pole with sign reading "Patterson"; iron post stamped "102 Cal 1909 G"	101.870

Primary leveling by W. H. Monahan in 1909 and D. S. Birkett in 1912

Near northeast corner of Crows Landing quadrangle

T. 5 S., R. 8 E., southeast corner of sec. 13, at T in roads, west side of road; spike in base of 1-foot square gatepost, marked "U. S. 55 B. M."	55.14
D. G. Barret house, in front of, south side of road, on top of head gate to irrigation lateral; top of nail in circle of paint; marked "U. S. 62 B. M."	62.59

From point near Newman northwest along Southern Pacific R. R. to point 3.3 miles northwest of Patterson

Newman, south end of station, 10 feet west of track, 5 feet east of telegraph pole; iron post stamped "88 G 1909 Cal"	87.757
Newman, in front of station; top of rail	88.3

	Feet
Newman, 1.3 miles northwest of, 10 feet south of telegraph milepost 719, on east side of track; spike in fence post, aluminum tag stamped "92"	92.10
Newman, 2.3 miles northwest of, 50 feet north of telegraph milepost 118, on east side of railroad track; spike in fence post, aluminum tag stamped "96"	96.11
Newman, 3.4 miles northwest of, 250 feet north of telegraph milepost 117, on east side of railroad; spike in fence post, aluminum tag stamped "100"	99.52
Newman, 4.4 miles northwest of, 5 feet north of telegraph milepost 116, 25 feet east of track; iron post stamped "104 G 1909 Cal"	103.574
Newman, 5.3 miles northwest of, 5 feet east of track, 100 feet southwest of telegraph milepost 115; spike in signpost reading "Crows Landing 1 mile," aluminum tag stamped "107"	106.79
Crows Landing, 125 feet east of station, 300 feet south of telegraph milepost 114; iron post stamped "111 G 1909 Cal"	111.115
Crows Landing, in front of station; top of rail	112.5
Crows Landing, 1 mile northwest of, 100 feet west of milepost 113; spike in base of signpost reading "Crows Landing 1 mile," aluminum tag stamped "109"	109.11
Crows Landing, 2 miles northwest of, 5 feet north of telegraph milepost 112; spike in fence post, aluminum tag stamped "109"	109.14
Crows Landing, 3 miles northwest of, 10 feet north of telegraph milepost 111, 25 feet east of track; iron post stamped "114 G 1909 Cal"	113.281
Crows Landing, 4 miles northwest of, 10 feet west of railroad track, 100 feet west of telegraph milepost 110; spike in base of section post 36, aluminum tag stamped "114"	113.36
Crows Landing, 5 miles northwest of, 25 feet north of telegraph milepost 109, on east side of railroad; spike in fence post, aluminum tag stamped "107"	106.21
Patterson, in front of station; top of rail	102.8
Patterson, 25 feet east of track, 5 feet north of telegraph pole with sign reading "Patterson"; iron post stamped "102 G 1909 Cal"	101.870
Patterson, 1.4 miles northwest of, 200 feet north of telegraph milepost 107, on east side of track; spike in fence post, aluminum tag stamped "93"	92.80
Patterson, 2.3 miles northwest of, 25 feet east of track, 200 feet north of milepost 106; spike in fence post, aluminum tag stamped "103"	103.17
Patterson, 3.3 miles northwest of, on east side of track, 5 feet north of telegraph milepost 105; iron post stamped "111 G 1909 Cal"	110.461

Primary leveling by L. F. Biggs in 1919

From Vanormer west along highways to west border of quadrangle

Vanormer, 0.7 mile northwest of, 1,000 feet south of milepost 104, 40 feet east of track; iron post stamped "111 1909 Cal. G"	110.411
Vanormer, 0.5 mile southeast of, west side of road, at road crossing, in base of corner fence post painted "U. S. 105 B. M."; spike	104.39
Vanormer, 0.8 mile west of, south edge of road, at crossroads, in base of power pole painted "U. S. 124 B. M."; spike	123.64
Vanormer, 1.8 miles west of, south side of road, at crossroads, in base of fence post painted "U. S. 152 B. M."; spike	151.47

	Feet
Vanormer, 3 miles west of, south edge of road, 100 feet west of Del Puerto Creek, on fence line; iron post stamped "186 1919 B B 1"	186.238
Vanormer, 4 miles west of, 20 feet south of road, 10 feet north of Del Puerto Creek, at mouth of canyon, summit of rock; chiseled "U. S. 212"	211.97
Mouth of Del Puerto Canyon, 0.9 mile west of, 100 feet north of Y road west, summit of boulder; chiseled "U. S. 248 B. M."	248.21
Mouth of Del Puerto Canyon, 2.3 miles west of, south bank of creek, north edge of road, in summit of large boulder; bronze tablet stamped "330 1919 B B 2"	330.341

PACHECO PASS QUADRANGLE

[Latitude 37°–37° 15′; longitude 121°–121° 15′]

MERCED AND STANISLAUS COUNTIES

Primary leveling by L. F. Biggs in 1917

From Pacheco Pass along highways east through quadrangle to San Luis ranch

	Feet
Pacheco Pass, near site of old mountain house, north edge of road, 20 feet west of eucalyptus tree; iron post stamped "1,356 6 1917"	1,357.069
Pacheco Pass, at east summit, north side of road, in base of telephone pole 25–35, highway b. m. 0400, scribed "U. S. 1386"	1,386.67
Pacheco Pass, 1.2 miles east of, south edge of road, in base of 18-inch white-oak tree scribed "U. S. 1,024"; copper nail	1,024.49
Pacheco Pass, 2.5 miles east of, south side of road, in base of 24-inch oak tree scribed "U. S. 650"; copper nail	650.87
Pacheco Pass, 3.5 miles east of, 6 miles west of San Luis ranch house, south side of road, at foot of hill at signboard reading "Los Banos 20 miles"; iron post stamped "450 1917 7"	450.424
San Luis ranch, 4.5 miles west of, in base of telephone pole 20–9 scribed "U. S. 370"; spike (highway b. m. 23)	370.49
San Luis ranch, 2.3 miles west of, north side of road, opposite T road south; iron post stamped "308 1917 8"	308.729
San Luis ranch, 1 mile west of, at angle in road, in base of telephone pole 33–21; spike	288.38

PETERS QUADRANGLE

[Latitude 37° 52′ 30″–38°; longitude 121°–121° 07′ 30″]

SAN JOAQUIN COUNTY

Primary leveling by G. L. Hagman in 1911

From point near Mount Carmel School east to Farmington

	Feet
Mount Carmel School, 2 miles east of, at south side of road, in base of telephone pole; spike, aluminum tag stamped "73.9"	73.60
Farmington, 5.2 miles west of, 900 feet west of Stanley ranch house, south side of road, in fence corner; iron post stamped "80 B"	80.746
Farmington, 4.2 miles west of, 1,000 feet west of county water tank, in base of telephone pole; spike, aluminum tag stamped "83.10"	83.85
Farmington, 3.2 miles west of, where road jogs slightly north, in base of telephone pole; spike, aluminum tag stamped "89.11"	89.97

	Feet
Farmington, 2 miles west of, at bend of road opposite county water tank, on south edge of road, at fence line; iron post stamped "94 B 1911"	94.766
Farmington, 1.25 miles west of, at south side of road, in base of telephone pole; spike, aluminum tag stamped "101.12"	101.16

Near Peters

Peters, 2 miles northeast of, at north side of road, in base of corner fence post; spike, aluminum tag stamped "140.17"	140.39
Railroad crossing; top of west rail	133.7
Peters, 1 mile northeast of, at south side of road, in base of fence post; spike, aluminum tag stamped "107.18"	107.25
Peters-Linden road, at southeast corner of junction with; iron post stamped "102"	102.325

From point near Collegeville to Wildwood School

Collegeville, 3.4 miles southeast of, near culvert, north side of road, in base of fence post; spike, aluminum tag stamped "71.54"	71.05
Collegeville, 2.8 miles southeast of, south side of road, in base of fence post; spike, aluminum tag stamped "69.55"	68.93
Collegeville, 2.2 miles southeast of, southwest corner of road forks; iron post stamped "67 B 1911"	67.652
Wildwood School, 0.9 mile north of, east side of road, in base of fence post; spike, aluminum tag stamped "65.56"	65.63

PLEASANTON QUADRANGLE

[Latitude 37° 30′–37° 45′; longitude 121° 45′–122°]

ALAMEDA COUNTY

Precise leveling by the U. S. Coast and Geodetic Survey in 1910–11

From Livermore southwest along Southern Pacific R. R. to Irvington

	Feet
Livermore, on Farmers' Union Building, just east of Southern Pacific R. R. station and north of track, in south side wall at southeast corner of the building; Geological Survey bronze tablet stamped "488" (U. S. C. & G. S. b. m. F–8)	487.712
Livermore, about 1 mile west of, south of Southern Pacific R. R. bridge 45A, north of highway, about 30 meters east of water tank, on top of wall to west abutment of highway bridge; red metal disk (U. S. C. & G. S. b. m. E–8)	460.701
Radum, about 1 mile east of Pleasanton, 0.1 mile east of signal tower, on east abutment of Southern Pacific R. R. concrete bridge 42A, south of track, about 3 meters east of derailing switch; red metal disk (U. S. C. & G. S. b. m. D–8)	367.614
Pleasanton, 0.25 mile west of the Southern Pacific R. R. station, on south head wall of highway culvert at Southern Pacific R. R. bridge 40C, about 3 meters north of track and 0.18 meter above top of rail; red metal disk (U. S. C. & G. S. b. m. C–8)	336.344
Verona, 90 meters west of Southern Pacific R. R. station, 23 meters east of highway crossing, in west abutment of Western Pacific R. R. overhead crossing, about 6 meters from east edge of abutment, 0.6 meter above Southern Pacific track; red metal disk (U. S. C. & G. S. b. m. B–8)	302.604

	Feet
Brightside, about 200 meters east of station, at mileage 34.9 on Southern Pacific R. R., north of track, on east abutment of Western Pacific R. R. bridge over Alameda Creek; red metal disk (U. S. C. & G. S. b. m. A–8)	225.544
Farwell, about 60 meters east of Southern Pacific R. R. station, 12 meters north of track; Geological Survey iron post stamped "167.099" (U. S. C. & G. S. b. m. Z–7)	167.496
Niles, about 1 mile east of, on north end of Southern Pacific R. R. bridge 30D over Alameda Creek; red metal disk (U. S. C. & G. S. b. m. Y–7)	124.383
Niles, about 60 meters west of railroad station, on southern one of two easternmost pillars under wooden water tank; red metal disk (U. S. C. & G. S. b. m. X–7)	86.699
Niles, 0.5 mile south of railroad station, about 9 meters north of crossing of Southern Pacific and Western Pacific railroads, east of track, on top of rock abutment of Southern Pacific R. R. bridge over Alameda Creek; red metal disk (U. S. C. & G. S. b. m. W–7)	84.271
Irvington, about 90 meters north of Southern Pacific R. R. station, on west head wall of culvert under tracks; red metal disk (U. S. C. & G. S. b. m. V–7)	70.029

Primary leveling by J. A. Vogelson in 1896

From Livermore west along road to Dublin, thence northwest to Contra Costa-Alameda county line

Livermore, in front of station, main track; top of rail	482.2
Tassajero, junction with road to, at northwest corner; iron post stamped "346"	346.077
Tassajero Valley, about 2.5 miles north of main road, on west side of Tassajero road, 2.2 feet east of monument on line between Contra Costa and Alameda counties; iron post stamped "485" (on a spur from preceding bench mark)	485.260
Dublin, intersection of center line of San Ramon road and south line of main road; iron post stamped "367"	366.817
Contra Costa and Alameda counties, boundary line, 2.3 feet west of county-line monument, on east side of road; iron post stamped "425"	424.970

From Livermore west along Southern Pacific R. R. to Pleasanton, thence south to Sunol, thence west to Niles, thence south to Irvington

Livermore, 300 feet east of station, near eucalyptus tree 18 inches in diameter; iron post stamped "486 B"	486.373
Livermore, southeast corner of block north of Southern Pacific R. R. track, in Farmers' Union Building; bronze tablet stamped "488" (U. S. C. & G. S. b. m. F–8)	487.712
Milepost 45, 225 feet west of, north side of track; iron post stamped "381.911 B"	382.123
Pleasanton, 4 feet east of milepost 42; iron post stamped "360.736 B"	361.023
Milepost 39, 5 feet north of; iron post stamped "297.496 B"	297.807
Milepost 36, 150 feet west of, on south side of track near fence; iron post stamped "227 B"	227.487
Farwell station, 200 feet east of; iron post stamped "167.099 B" (U. S. C. & G. S. b. m. Z–7)	167.496

	Feet
Niles, in school yard, 6 feet north of west gate; iron post stamped "76.408 B"	76.791
Irvington, 100 feet east of Irvington Hotel, at northeast corner of fence; iron post stamped "71.631 B"	71.993

From Irvington northeast along road to Livermore

Mission Pass, 5 feet east of electric-light pole 3803; iron post stamped "649.890 B"	650.173
Sunol, 2 miles east of, 40 feet from bridge, north side of road; iron post stamped "336.986 B"	337.193
Livermore, 5 miles southwest of, opposite old barn on east side of road, 10 feet west of oak tree on west side of road; iron post stamped "609.917 B"	610.041

RIPON, SALIDA, WESTLEY, AND WESTPORT QUADRANGLES

[Latitude 37° 30′–37° 45′; longitude 121°–121° 15′]

SAN JOAQUIN AND STANISLAUS COUNTIES

Primary leveling by W. H. Monahan in 1909 and D. S. Birkett in 1912–13

From milepost 101 near Ripon west and southwest along highway to San Joaquin River

	Feet
Milepost 104 (now 103) 50 feet north of, west side of track, at fence line; iron post stamped "61 B"	61.474
Ripon, 1 mile west of, at T in telephone line, 200 feet east of E. H. Graves's ranch house, south side of road; spike in base of telephone pole described "U. S. 58 B. M."	58.15
Ripon, 2.2 miles west of, at Thomas Frederick's ranch, near intersection with private road leading north, 450 feet east of residence, south side of road; spike in base of telephone pole scribed "U. S. 55 B. M."	55.25
Ripon, 3 miles west of, southwest corner of intersection of roads, 900 feet west of F. Stephenson's ranch house; iron post stamped "46 1912"	46.099
Ripon, 3.7 miles west of, at T in roads, opposite small cottage with windmill in yard; spike in base of H. Rutler's mailbox post, scribed "U. S. 42 B. M."	42.84
Ripon, 5.6 miles due west of, 0.4 mile east of N. Jorgenson's ranch house, south side of road, at gatepost leading to William Garvey's ranch house, 30 feet east of William Garvey's mailbox; spike in gatepost scribed "U. S. 34 B. M."	34.04
San Joaquin bridge, 1.3 miles northeast of, 7 miles west by 4 miles south of Ripon, southeast corner of steel bridge over Red Bridge Slough, in concrete abutment; aluminum tablet stamped "30 1912"	30.861

From point 1.5 miles northwest of Modesto southwest along highway 8.3 miles, thence south 4 miles, thence east and south to sec. 12, T. 5 S., R. 8 E.

Modesto, 200 feet north of intersection of H St., California Ave., and Washington St.; top of bolt on edge of water-wagon hydrant, opposite first O in Modesto	83.31

	Feet
Modesto, 1.6 miles southwest of, third concrete syphon on road from Modesto, north side of road; chiseled square on top of syphon, marked "U. S. 82 B. M."	82.17
Modesto, 2.1 miles southwest of, north side of road, opposite James McNeil's ranch, in top of fourth concrete syphon from Modesto; aluminum tablet stamped "73 1912"	73.478
Modesto, 3.4 miles southwest of, at big angle in road, south side of road, northwest corner of brick building; spike driven in base, marked "U. S. 67 B. M."	67.12
T. 4 S., R. 8 E., corner of secs. 3, 4, 9, and 10, 5.2 miles southwest of Modesto, intersection of Modesto-Tuolumne road and Stone Ave., in top of concrete syphon; aluminum tablet stamped "62 1912"	62.830
Modesto, 7 miles southwest of, 0.2 mile east of Shiloh School, 200 feet west of road leading to C. E. Nichol's house, south side of road; spike in base of telephone pole, marked "U. S. 56 B. M."	56.35
Tuolumne, 1.5 miles north by 0.5 mile east of, 0.3 mile west of Shiloh School, south side of road; chiseled square on top of concrete syphon, marked "U. S. 54 B. M."	54.03
T. 4 S., R. 9 E., N. W. ¼ sec. 7, 0.5 mile north of Tuolumne, at T in road, northwest corner of intersection, near fence corner; iron post stamped "48 1912"	48.372
Tuolumne; floor of bridge over San Joaquin River	54.5
Tuolumne, 0.7 mile south of, south end of guard rail of wooden bridge over slough; spike on west side of bridge, marked "U. S. 43 B. M."	43.86
Tuolumne, 1 mile southeast of, 400 feet north of T in road, west side of road; chiseled square on top of concrete syphon, marked "U. S. 50 B. M."	50.93
Tuolumne, 2.1 miles southeast of, 0.5 mile north of road west to Westley and east to Ceres, west side of road; spike in top of head gate of irrigation lateral, marked "U. S. 55 B. M."	55.57
T. 4 S., R. 8 E., corner of secs. 19, 20, 29, and 30, 10 miles west by 1.5 miles south of Ceres, south side of Ceres road, 1 mile west of Laird School, 33 feet west from north-south fence; iron post stamped "49 1912"	49.512
Ceres, 8 miles west of, opposite Laird School, at intersection of road, south side of road; spike in telephone pole, marked "U. S. 53 B. M."	53.33
Ceres, 7 miles west of, at T in roads, south side of road, 10 feet east of irrigation ditch; spike in telephone pole, marked "U. S. 58 B. M."	58.46
Ceres, 6 miles west by 1.5 miles south of, at corner of secs. 22, 23, 26, 27, T. 4 S., R. 8 E., 2 miles east of Laird School, at southeast corner of intersection of roads; iron post stamped "59 1912"	59.309
T. 4 S., R. 8 E., corner of secs. 23, 24, 25, and 26, 1.5 miles south by 5 miles west of Ceres, southwest corner of intersection of roads; spike in base of telephone pole marked "U. S. 62 B. M."	62.13
Ceres, 2.5 miles south by 5 miles west of, southeast corner of intersection of roads, southwest corner of sec. 25; spike in fence post, marked "U. S. 56 B. M."	56.76
T. 4 S., R. 8 E., southeast corner of sec. 25, northwest corner of intersection of roads, near Westport Church; iron post stamped "63 1912"	63.237

	Feet
T. 5 S., R. 9 E., northwest corner of sec. 6, 100 feet south of irrigation lateral No. 3, east side of road; spike in telephone pole, marked "U. S. 60 B. M."	60.84
T. 5 S., R. 9 E., southwest corner of sec. 6, at T in roads, east side of road; spike in base of telephone pole, marked "U. S. 60 B. M."	60.07
T. 5 S., R. 8 E., southeast corner of sec. 12, northwest corner of intersection of roads, 15 feet east of irrigation lateral; iron post stamped "53 1912"	53.989

From southeast corner of sec. 19, T. 4 S., R. 8 E., west and south to Westley

T. 4 S., R. 7 E., southeast corner of sec. 24, 2.8 miles east of Grayson, at T in roads, southwest corner of intersection; spike in telephone pole, marked "U. S. 46 B. M."	46.50
T. 4 S., R. 7 E., southwest corner of sec. 24, steel highway bridge crossing Laird Slough, southwest corner; chiseled square on top of concrete pier, marked "U. S. 45" (tie U. S. C. E.)	45.50
Grayson, 0.3 mile northeast of, at drawbridge over San Joaquin River, upstream side of bridge, west end; chiseled square and "U. S." on top of concrete cylinder marked "43 B. M." (tie U. S. C. E.)	43.31
Westley, 1 mile east of, at T in roads near cemetery, south side of road; spike in telephone pole, marked "U. S. 58 B. M."	58.63

From point 1.5 miles southeast of Vernalis east 4.7 miles to San Joaquin River

Romain, opposite signboard on Southern Pacific R. R.; top of rail	93.4
T. 4 S., R. 6 E., southeast corner of sec. 1, 1 mile east of Romain; spike in fence post marked "U. S. 74 B. M."	73.76
Romain, 2 miles east of, at southwest corner of intersection of east-west road with Grayson-San Joaquin City road; spike in telephone pole, marked "U. S. 55 B. M."	54.75
Vernalis, 1 mile south by 4.7 miles east of, on ranch on opposite side of river from Frankenheisner stock ranch, 0.5 mile east of private water tank, in base of north side of gate leading to levee 30 feet distant; spike, marked "U. S. 32 B. M."	31.65
T. 4 S., R. 7 E., northeast corner of sec. 4 (unsurveyed), 5 miles east by 1 mile south of Vernalis, 75 feet from west bank of San Joaquin River, 1,100 feet east of levee on west side of river opposite old one-story shack on Frankenheisner's stock ranch, 700 feet from building on inside of curve of meander of river, 0.4 mile downstream from channel excavated by dredger in building a levee perpendicular to river, near fence which follows curve of river, 3 feet west of large fence post with white band painted around top; iron post stamped "33 1913" (tie U. S. C. E.)	32.891

From point 3.3 miles northwest of Patterson northwest along Southern Pacific R. R. to point 6.3 miles northwest of Westley

Patterson, 4.5 miles northwest of, 10 feet west of track, 200 feet north of telegraph milepost 104; spike in whistle post, aluminum tag stamped "104"	103.83
Patterson, 5.4 miles northwest of, 100 feet north of milepost 103, on east side of track; spike in fence post, aluminum tag stamped "95"	94.34
Patterson, 6.3 miles northwest of, 200 feet north of telegraph milepost 102, on east side of track; spike in fence post, aluminum tag stamped "87"	86.55

	Feet
Westley, 200 feet east of, in front of station; iron post stamped "86 G 1909 Cal"	85.794
Westley, 1.3 miles northwest of, on east side of track, 150 feet north of milepost 700; spike in base of whistle signpost, aluminum tag stamped "91"	91.11
Westley, 2.3 miles northwest of, 25 feet east of track, 300 feet north of telegraph milepost 99; spike in fence post, aluminum tag stamped "94"	94.10
Westley, 3.3 miles northwest of, 25 feet east of track, 5 feet south of milepost 98; iron post stamped "85 G 1909 Cal"	85.190
Westley, 4.3 miles northwest of, 25 feet east of track, 100 feet north of telegraph milepost 97; spike in fence post, aluminum tag stamped "80"	79.28
Westley, 5.3 miles northwest of, 25 feet east of track, 150 feet north of telegraph milepost 96; spike in fence post; aluminum tag stamped "87"	87.08
Westley, 6.3 miles northwest of, 25 feet east of track, 5 feet south of telegraph milepost 95; iron post stamped "100 G 1909 Cal"	99.532

ROMAIN QUADRANGLE

[Latitude 37° 30′–37° 37′ 30″; longitude 121° 15′–121° 22′ 30″]

SAN JOAQUIN AND STANISLAUS COUNTIES

Primary leveling by L. F. Biggs in 1919

Along highways near southwest corner of quadrangle

	Feet
Mouth of Hospital Canyon, 1.6 miles southwest of, at road northwest, in fence post painted "U. S. 431"; spike	430.94
Mouth of Hospital Canyon, 50 feet north of creek bank, at road to house, in gatepost painted "U. S. 350"; spike	349.35
Common corner of Tps. 3 and 4 S., Rs. 5 and 6 E., west edge of road at road east; iron post stamped "278 1919 B B 12"	277.507
Ingram Canyon, 2.6 miles northwest of Spring Canyon, 20 feet west of road; summit of boulder, chiseled "U. S. 1,038"	1,037.94
Ingram Canyon, 3.6 miles northwest of Spring Canyon, 0.1 mile northwest of mine buildings, north of road, in base of 36-inch oak tree, scribed "U. S. 1,281"; nail	1,281.06
Mouth of Spring Canyon, 4 miles northwest of, south edge of trail, in saddle between Ingram and Hospital Canyons; rock point, marked "1,566"	1,566.37
Mouth of Spring Canyon, 4 miles northwest of, 0.1 mile west of saddle between Ingram and Hospital Canyons, on summit of hill; bronze tablet stamped "1,651 B 1919 B 10"	1,650.938
Summit of saddle between Ingram and Hospital Canyons, 0.5 mile north of, in small flat, west of trail, at foot of tree; summit of boulder chiseled "U. S. 1,215"	1,214.99
Hospital Canyon, 0.6 mile south of, east of drain at trail and canyon forks; summit of boulder, chiseled "U. S. 744"	743.35
Mouth of Hospital Canyon, 3.5 miles west of, 50 feet south of road, at trail forks to Ingram Canyon; summit of boulder, chiseled "U. S. 595"	595.02

Primary leveling by D. S. Birkett in 1912

From point 1.5 miles southeast of Vernalis east 4.7 miles to San Joaquin River

	Feet
Romain, opposite signboard on Southern Pacific R. R.; top of rail	93.3
T. 4 S., R. 6 E., southeast corner of sec. 1, 1 mile east of Romain; spike in fence post, marked "U. S. 74 B. M."	73.71

From Mount Boardman quadrangle north along highways through west part of Romain quadrangle into Vernalis quadrangle

T. 5 S., R. 6 E., sec. 9, Ingram Canyon, 50 feet west of mouth of Spring Canyon; iron post stamped "671 B 1919 B 9"	671.001
Ingram Canyon, 1 mile northwest of mouth of Spring Canyon, northeast of road, in root of 24-inch oak tree scribed "U. S. 813"; nail	813.06
Ingram Canyon, 1.7 miles northwest of Spring Canyon, 50 feet north of road forks; summit of boulder, chiseled "U. S. 876"	875.97

Primary leveling by W. H. Monahan in 1909

From point near Emerald to point near Westley

Westley, 5.3 miles northwest of, 25 feet east of track, 150 feet north of telegraph milepost 96; spike in fence post, aluminum tag stamped "87"	87.03
Westley, 6.3 miles northwest of, 25 feet east of track, 5 feet south of telegraph milepost 95; iron post stamped "100 G 1909 Cal"	99.482

SALIDA QUADRANGLE

[Latitude 37° 37′ 30″–37° 45′; longitude 121°–121° 07′ 30″]

STANISLAUS COUNTY

Primary leveling by G. L. Hagman in 1911

Near Ripon

	Feet
Ripon, 1.7 miles northeast of, at turn of road to north, at northwest corner, in base of fence post; spike, aluminum tag stamped "75"	75.88
Ripon, 0.4 mile east of, at turn of road to north, at northwest corner, in base of fence post; spike, aluminum tag stamped "68"	68.48
Manteca, 6 miles southeast of, on west side of railroad, 50 feet north of milepost 104 (now 103) at fence line; iron post stamped "61 B 1901" (Bull. 342, p. 16)	61.474
Ripon, 0.5 mile north of, on east side of road, in base of telephone pole 550–107; spike, aluminum tag stamped "66.63"	65.89

SAN JOSE QUADRANGLE

[Latitude 37° 15′–37° 30′; longitude 121° 45′–122°]

ALAMEDA AND SANTA CLARA COUNTIES

Precise leveling by the U. S. Coast and Geodetic Survey in 1910–11

From Warmsprings south along Southern Pacific R. R. to San Jose, thence northwest to Lawrence

	Feet
Warmsprings, on west head wall of culvert 34E under Southern Pacific R. R. track; red metal disk (U. S. C. & G. S. b. m. U–7)	32.139
Warmsprings, about 90 meters north of Southern Pacific R. R. station, on west head wall of culvert 36B under crossing of track and highway; red metal disk (U. S. C. & G. S. b. m. T-7)	42.064

	Feet
Warmsprings, in west head wall of culvert 38A under Southern Pacific R. R. track and about 0.6 meter below it; red metal disk (U. S. C. & G. S. b. m. S–7)	15.738
This bench mark has probably been destroyed or moved.	
Milpitas, at Southern Pacific R. R. mileage 39.9, in top surface of west head wall of culvert under county road, about 24 meters east of track and about 1 meter above county road; red metal disk (U. S. C. & G. S. b. m. R–7)	17.136
Wayne, at mileage 43.9 of Southern Pacific R. R., in top of south abutment to bridge 43G, east of the track and about 0.5 meter below it; red metal disk (U. S. C. & G. S. b. m. Q–7)	67.684
Santa Clara, north of Southern Pacific R. R. station, in south end of large grass park; red metal disk set in concrete post (U. S. C. & G. S. b. m. N–7)	75.449
Lawrence, opposite Southern Pacific R. R. station, on the right of way, 40.9 meters north of track, 1.9 meters from line fence, 8.9 meters west of road fence; red metal disk set in concrete post (U. S. C. & G. S. b. m. M–7)	66.991

Precise leveling by U. S. Coast and Geodetic Survey in 1919

Near San Jose

San Jose, at east entrance to Hall of Records, on north balustrade about 1.5 meters above ground; U. S. G. S. aluminum-bronze disk stamped "98 S. F." (U. S. C. & G. S. b. m. P–7)	98.097
San Jose, just west of Southern Pacific R. R. station, south of tracks, in northwestern one of four center pillars under Southern Pacific water tank; red metal disk (U. S. C. & G. S. b. m. O–7)	90.088
San Jose, in northeast corner of Trinity Parish Episcopal Church; G. S. aluminum tablet stamped "S. F. 98–1908 36"	97.474
San Jose, 21 North First St., in southeast corner of brick warehouse and office of The Sperry Flour Co.; G. S. tablet stamped "S. F. 96 1908 1" (U. S. C. & G. S. b. m. I–19)	95.892
San Jose, 3.5 miles south of, 50 feet west of milepost 54, west of track, 400 feet north of Franklin School; iron post stamped "S. F. 130 1908 2" (U. S. C. & G. S. b. m. J–19)	130.452
San Jose, 6.5 miles south of, west of track, 50 feet west of milepost 57; U. S. G. S. iron post stamped "S. F. 176 1908 B" (U. S. C. & G. S. b. m. K–19)	176.004
San Jose, 9.7 miles south of, 800 feet south of milepost 60, 50 feet north of road to Mrs. L. Little's ranch house where it crosses railroad, at west edge of wagon road; U. S. G. S. iron post stamped "S. F. 199 1908 4" (U. S. C. & G. S. b. m. L–19)	198.983
San Jose, on Southern Pacific R. R. culvert 62-B over irrigation canal, in northwest corner; red metal disk (U. S. C. & G. S. b. m. N–19)	252.516
San Jose, 12.5 miles south of, 0.2 mile north of Coyote, 150 feet south of road crossing, opposite milepost 63, west of track; G. S. iron post stamped "S. F. 253 1908 5" (U. S. C. & G. S. b. m. O–19)	253.520
Coyote, just north of Southern Pacific R. R. station, east of track, in southwest one of four center pillars under Southern Pacific water tank; red metal disk (U. S. C. & G. S. b. m. P–19)	255.252

Primary leveling by C. C. Ward in 1899, by B. A. Jenkins in 1908, by L. F. Biggs in 1909, and by S. E. Blout in 1903

From Irvington south along Southern Pacific R. R. to San Jose

	Feet
Milepost 37; iron post stamped "46.563 B"	46.903
Milepost 40, 350 feet south of, opposite small bridge, east side of track; iron post stamped "11.301 B"	11.565
Milepost 43, 475 feet south of, at highway crossing, west of track; iron post stamped "37.505 B"	37.694
Milepost 46, 50 feet east of, east of track; iron post stamped "69.117 B"	69.230

At San Jose

San Jose, 150 feet east of Southern Pacific R. R. standard-gage station, in circular base of iron water stand about 2 feet in diameter; log bolt (U. S. C. & G. S. b. m.)	91.54

From San Jose southeast along railroad 8.6 miles

San Jose, 2 miles south of, 300 feet north of brickworks, west of railroad, in base of semaphore; bolthead, painted "U. S. 112 B. M. No. 1"	112.68
Edenvale, in front of station; top of rail	183.7

From San Jose southwest along Southern Pacific R. R. to point 2 miles north of Los Gatos

San Jose, in front of narrow-gage station; top of rail	96.4
Campbell, in front of station; top of rail	199.5
Campbell, 1.1 miles southwest of, 100 feet east of tank, in cement culvert; aluminum tablet stamped "S. F. 225 1908 35"	224.802
Vasona, in front of station; top of rail	276.

SAN LUIS CREEK QUADRANGLE

[Latitude 37°–37° 07′ 30″; longitude 121°–121° 07′ 30″]

MERCED COUNTY

Primary leveling by Roscoe Reeves in 1916

From north border of quadrangle along highway south and east through center of quadrangle to east border of quadrangle

	Feet
San Luis ranch, 2.5 miles north of, 300 feet north of summit of road to Howard ranch, in gatepost; spike, painted "384"	383.93
San Luis ranch, 1.2 miles north of, 6 feet west of road; painted circle on rock flush with ground, painted "271"	270.94
San Luis ranch, 0.5 mile northeast of, 200 feet northeast of stream crossing, summit of hill, on boulder flush with ground; circle, painted "274"	273.96
San Luis ranch, on east post of northeast gate of barnyard to pasture; spike, painted "259" on post	258.99
Los Banos, 14 miles west of, 200 feet west of San Luis Creek, at entrance to San Luis ranch, in telephone pole; spike, painted "253" on pole	252.77
Los Banos, 14 miles west of, 200 feet west of San Luis Creek, north edge of road, on west side of driveway entrance to San Luis ranch; iron post stamped "252"	252.453

	Feet
Los Banos, 12 miles west of, at angle in road where telephone line leaves highway, in telephone pole; spike, painted "257" on pole	256.55
Los Banos, 11 miles west by 1 mile north of, at T road south, north side of road, in west gatepost; spike, painted "217" on post	216.66
Los Banos, 11 miles west of, in telephone pole 36–16, south side of L road; spike, painted "300" on pole	300.07
T. 10 S., R. 8 E., southeast corner of sec. 13, 11 miles west of Los Banos, 10 feet south of telephone pole 36–16; iron post stamped "300"	299.997
T. 10 S., R. 9 E., southwest corner of sec. 17, in telephone pole; spike, painted "296" on pole	296.11
Howard ranch, 2.5 miles southwest of, 500 feet south of ranch house, in corner fence post; spike, painted "279"	279.73
T. 9 S., R. 8 E., near center of sec. 27, 500 feet southwest of ranch house, in northeast corner of T road east, in southwest corner of barn lot; iron post stamped "279"	279.795
San Luis ranch, 3.1 miles north of, on road to Howard ranch, east edge of road; painted circle on boulder flush with ground, painted "254"	254.39

STOCKTON QUADRANGLE

[Latitude 37° 52′ 30″–38°; longitude 121° 15′–121° 22′ 30″]

SAN JOAQUIN COUNTY

Precise leveling by the U. S. Coast and Geodetic Survey

From El Pinal south along Southern Pacific R. R. to French Camp

	Feet
El Pinal, in north abutment of bridge 93A, west of Southern Pacific R. R. track, about 0.6 meter below top of rail; red metal disk (U. S. C. & G. S. b. m. G–9)	28.077
Stockton, about 2 miles north of, 10 meters north along the track from milepole 93, 0.5 meter west of east line fence on right of way of Southern Pacific R. R., 15.7 meters east of track and about 1 meter below it; Geological Survey iron post stamped "20 B" (U. S. C. & G. S. b. m. F–9)	20.568
Stockton, in Western Pacific R. R. station, in west side of southwest pillar of portico at south end; red metal disk (U. S. C. & G. S. b. m. E–9)	23.232
Stockton, in top of concrete curbing around a palm tree, in passageway between Southern Pacific R. R. waiting room and baggage room; red metal disk (U. S. C. & G. S. b. m. D–9)	19.665
Stockton, about 2 miles south of, in east head wall of concrete culvert 87B, under Southern Pacific R. R. track, 140 meters north of Western Pacific R. R. crossing, about 0.6 meter below the track; red metal disk (U. S. C. & G. S. b. m. C–9)	17.428
French Camp, about 1 mile north of, 0.6 meter east of Southern Pacific R. R. milepost 87, 1 meter below the track; Geological Survey iron post stamped "15 B" (U. S. C. & G. S. b. m. B–9)	14.035

NOTE.—B–9 bench mark of the U. S. Geological Survey, the position of which was originally published as 8 feet south of milepost 88, was found washed out and was relocated as described above.

	Feet
French Camp, about 0.7 mile north of, at railroad mileage 86.7, on east head wall of concrete culvert 86C of Southern Pacific R. R., about 0.6 meter below the track; red metal disk (U. S. C. & G. S. b. m. A–9)	17.723
French Camp, in east head wall of concrete culvert 84A under Southern Pacific R. R. track; red metal disk (U. S. C. & G. S. b. m. Z–8)	22.808

QUADRANGLE INCLUDING LATHROP, MANTECA, RIPON, SALIDA, STOCKTON, TRACY, VERNALIS, WESTLEY, AND WESTPORT 7½′ QUADRANGLES

[Latitude 37° 30′–38°; longitude 121°–121° 30′]

SAN JOAQUIN AND STANISLAUS COUNTIES

Precise leveling by C. H. Semper in 1901–2

From milepost 94 southeast along Southern Pacific R. R. to Modesto

	Feet
Milepost 94, 8 feet north of, east side of track, on fence line; iron post stamped "20 B"	20.568
Stockton, at Park St. crossing; top of rail	19.0
Stockton, San Joaquin County courthouse, west door of north entrance, in angle of wall; bronze tablet stamped "18 B"	18.353
Stockton, in front of station; top of rail	19.2
Stockton, at Sacramento St. crossing; top of rail	22.4
Stockton, 0.6 mile south of, at crossing of Santa Fe Ry.; top of rail	22.1
French Camp, 1 mile north of, 2 feet east of milepost 87; iron post stamped "15 B" (Reset by U. S. C. & G. S.)	14.035
French Camp, in front of station: top of rail	19.8
Milepost 85, 200 feet east of, east side of track, at road crossing, at fence line; iron post stamped "19 B"	19.357
Lathrop, 250 feet north of station, at northwest corner of railroad park, on edge of road; iron post stamped "20 B"	20.321
Lathrop, in front of station; top of rail	22.0
Manteca, 25 feet south of station, 20 feet west of milepost 98, at fence line; iron post stamped "36 B"	36.221
Manteca, 2.9 miles south of, 20 feet west of milepost 10, west side of track, at fence line; iron post stamped "45 B"	45.392
Milepost 104, 50 feet north of, west side of track, at fence line; iron post stamped "61 B"	61.474
Ripon, crossing at station; top of rail	67.9
Ripon, 2.3 miles south of, opposite milepost 107, east side of track, at fence line; iron post stamped "67 B"	66.995
Salida, 2.6 miles south of, opposite milepost 110, east side of track, at fence line; iron post stamped "78 B"	77.974
Milepost 113, opposite, east side of track, at fence line; iron post stamped "82 B"	82.527
Modesto, in front of station; top of rail	86.5
Modesto, in southwest corner of courthouse; bronze tablet stamped "91 B"	91.742

Primary leveling by J. B. Lippincott in 1896

At Stockton

	Feet
Stockton, southwest corner of Scott Ave. (south side of Mormon Channel) and Center St., west end of Cool Corner saloon, on north iron doorsill; "Cool Corner" bench mark	16.033
Stockton, southwest corner of Scott Ave. and Center St., 18 feet from curb corner, 12 feet north of iron doorsill; iron post stamped "16"	16.373
Stockton channel, at southeast head of, corner of Weber Ave. and Eldorado St., east of steps at corner post; iron plate	13.114
Stockton, on north side of courthouse and west side of walk, on top of stone post	16.49
Stockton, San Joaquin courthouse, in angle of wall near columns, between north door and first window west of it; bronze tablet stamped "18"	18.353
Stockton, Southern Pacific R. R. passenger station, Milton and Oakland branch; top of rail	19.1

From Stockton northeast along Milton road and Southern Pacific R. R. to Peters

J. B. Marsh's house, at northeast corner of entrance of lean-to; iron post stamped "34"	34.055
Farmington, junction with road to, near Smyth's ranch; iron post stamped "67"	67.051
Peters-Linden road, at southeast corner of junction with; iron post stamped "102"	102.325

Primary leveling by U. S. Corps of Engineers in 1913–14

Patterson Colony, 3 miles northeast of, at southeast corner of intersection of Olive and Willow avenues, 1,900 feet south of river; iron post set in concrete (U. S. C. E. b. m. 421)	52.47
Patterson Colony, 3.5 miles north of, south of Lemon Ave., 1,100 feet west of river bank, northeast corner of M. W. Anderson's 20-acre lot No. 696; iron post set in concrete (U. S. C. E. b. m. 432)	50.23
Patterson, about 3.75 miles north of, south line of Fruit Ave. (Patterson Colony), 2,100 feet west of north bank of river and 1,200 feet west of west bank of bottom land, northeast corner block 714 of Patterson Colony; iron post set in concrete (U. S. C. E. b. m. 423)	45.33
Ritchie ranch, 3.4 miles east of, at corral fence intersection, 2, 500 feet west of east bank of San Joaquin River, 400 feet west of oak tree in another corral, on west bank of slough, 2 miles south of McPike Landing, 1,700 feet northwest of Puerto Creek; iron post set in concrete (U. S. C. E. b. m. 424)	48.81
Laird Slough Bridge, 1.75 miles above, in wire fence line, 30 feet west of 3.5-foot oak tree, 0.5 mile south of McFall ranch house, 250 feet north of right bank of river, at mouth of slough which is outlet for Brush Lake; iron post set in concrete (U. S. C. E. b. m. 425)	45.14
T. 4 S., R. 7 E., southwest corner of sec. 24, steel highway bridge on Laird Slough, southwest corner, on top of concrete pier marked "U. S. 45"; chiseled square (U. S. G. S. b. m. 7)	45.50

	Feet
McPike Landing, in fence line 80 feet south of south river bank, 30 feet west of west bank of slough 75 feet wide, 110 feet east of 3-foot oak tree, 130 feet north of 3.5-foot oak tree, 200 feet south of angle in fence; (U. S. C. E. b. m. 426) iron post set in concrete	47.17
Dos Rios Rancho, 180 feet east of east bank of Laird Slough, 125 feet east of center line of 6-foot levee, opposite pile and brush retaining wall of Dos Rios dairy, in fence line, 8,000 feet north of Laird Slough Bridge; iron post set in concrete (U. S. C. E. b. m. 426½)	38.69
Grayson, 0.3 mile northeast of, at drawbridge over San Joaquin River, upstream side of bridge (west end), on top of concrete cylinder, marked "U. S. 43 B. M."; chiseled square (U. S. G. S. b. m. 7)	43.31
Upper White Lake Slough Inlet, 25 feet west of west bank of river, 125 feet south of south bank of slough to White Lake, 25 feet north of 2.5-foot oak tree, 3,000 feet north of mouth of Laird Slough; iron post set in concrete (U. S. C. E. b. m. 427)	38.75
Upper White Lake, 1 mile north of, at horseshoe bend, 60 feet west of west bank of river, 30 feet north of 4.5-foot oak tree, 2,600 feet above mouth of Tuolumne River, directly opposite point of land at inside of bend; iron post set in concrete (U. S. C. E. b. m. 428)	36.98
Sturgeon Bend, 185 feet west of west bank of San Joaquin River, 5 feet from 3-foot oak tree, 50 feet from 4-foot oak, 1 mile below inlet of Finnegan Cut, at lower end of bend in river; iron post set in concrete (U. S. C. E. b. m. 429)	34.99
McPherson Bridge over Finnegan Cut, 65 feet north of north end of, 50 feet east of cabin 3,700 feet below inlet, 55 feet east of east bank of Finnegan Cut; iron post set in concrete (U. S. C. E. b. m. 430)	34.21
Finnegan Cut, 100 feet east of east bank of, 150 feet southeast of point where Finnegan Cut branches, 6 feet from 3-foot oak tree, 2,400 feet below intersection of Amphir and Finnegan Cuts, 1,200 feet below lower end of small island formed by 2 parts of Finnegan Cut; iron post set in concrete (U. S. C. E. b. m. 431)	30.63
Vernalis, 5 miles east and 1 mile south of, 25 feet from west bank of San Joaquin River, 1,100 feet east of levee, 0.4 mile downstream from channel excavated by dredger in building a levee perpendicular to river, near fence which follows curve of river, 3 feet west of large fence post with white band painted around top; iron post stamped "33 1913" (U. S. G. S. b. m.)	32.89
Minges's Landing, 12 feet northwest of pump station, 100 feet west of west bank of San Joaquin River, 175 feet east of group of four oak trees at fence line; iron post set in concrete (U. S. C. E. b. m. 432)	33.87
Elliott Lake, at Rod and Gun Club grounds, 170 feet east of east bank of lake, 170 feet east of group of 3.5-foot and 4-foot oak trees, in east and west fence line, 25 feet east of gate, at fence intersection, 65 feet south of gun club barn; iron post set in concrete (U. S. C. E. b. m. 433)	32.48

	Feet
Stadler's ranch house, 0.5 mile north of, 100 feet southwest of southwest bank of river, 50 feet west of levee 6 feet high, at end of temporary road from ranch house to river, 50 feet south of group of 3-foot oak trees, 1 mile north of Minges's Landing, about 900 feet up second ranch above mouth of Stanislaus River; iron post set in concrete (U. S. C. E. b. m. 434)	32.29
At lower end of first ranch below Stanislaus River, 60 feet east of 2.5-foot leaning oak, at top break of east (right) bank of San Joaquin River, 0.5 mile below mouth of Stanislaus River, 150 feet below inlet of nearest of two sloughs which bear northerly; iron post set in concrete (U. S. C. E. b. m. 435)	30.71
John Ohm Place, San Joaquin City, at fence line of yard, 50 feet southwest of John Ohm residence, about 100 feet northeast of northeast fence line of main road; iron post set in concrete (U. S. C. E. b. m. 436)	43.54
Gerlach ranch house, 500 feet southwest of southwest bank of river, at fence intersection, 320 feet east of barn, 380 feet southeast of house, 0.75 mile north of junction of Ripon and San Joaquin City and Banda roads, at abandoned hotel; iron post set in concrete (U. S. C. E. b. m. 437)	31.44
Gerlach place, 4,800 feet north of, 250 feet south of south (left) bank of San Joaquin River, in group of 4-foot oak trees at upper end of long reach, about 350 feet south of mouth of slough which bears northeasterly; iron post set in concrete (U. S. C. E. b. m. 438)	27.17
San Joaquin City, 1.3 miles northeast of, at Durham Ferry Bridge, 7 miles west and 4 miles south of Ripon, southeast corner of steel bridge over Red Bridge Slough, in concrete abutment; U. S. G. S. aluminum tablet, stamped "30 1912"	30.861
Red Bridge Slough, 2,800 feet west of outlet of, at right angle bend in San Joaquin City-Ripon road, 2 miles west and 6 miles south of Ripon, south side of road, 25 feet east of fence intersection, on levee, 8 feet from 3-foot oak tree; iron post set in concrete (U. S. C. E. b. m. 439)	26.54
Kasson Farms Canal Inlet, at sharp bend 1.5 miles above, at lower end and on center line produced of long reach running north and south, about 25 feet south of south (left) bank of river; iron post set in concrete (U. S. C. E. b. m. 440)	24.95
Kasson Farms lower pump, on north levee at upper end of canal to first pumping lift, 1,100 feet south of south (left) river bank, 130 feet north of pump; iron post set in concrete (U. S. C. E. b. m. 441)	34.02
Paradise Dam, 1.4 miles south of, 600 feet northwest of river, at lower end of Carson Long Reach, at north corner of corral on M. C. Wright place; iron post set in concrete (U. S. C. E. b. m. 442)	21.35
Lathrop, at mile 78.1 of Southern Pacific R. R., at west end of viaduct leading to west end of bridge over San Joaquin River, on top surface of bearing stone on northwest pier, about 3.9 feet below top of rail; red metal disk 3 inches in diameter, lettered "U. S. C. & G. S. B. M."	27.215
Brandt bridge, at south end abutment of; U. S. G. S. aluminum tablet stamped "21 1910 30" (U. S. G. S. b. m.)	21.039

	Feet
Garwood bridge, 60 feet east of, north side of road at fence line; iron post stamped "7 1910" (U. S. G. S. b. m.)	7.556
Stockton Canal, on landward slope of northerly levee of San Joaquin River, about 600 feet downstream from mouth of Stockton Canal; iron post set in concrete (U. S. C. E. b. m. 201)	13.060
Stockton, west door of north entrance of San Joaquin County courthouse, in angle of wall; U. S. G. S. b. m. bronze tablet stamped "18–B"	18.353

Primary leveling by S. E. Blout in 1903 and by H. C. Semper in 1905

From Lathrop southwesterly along Southern Pacific R. R. to Midway

Lathrop, 3.5 miles southwest of, 30 feet southwest of milepost 79, south side of track; iron post stamped "17.638 B"	17.976
Milepost 75, 10 feet north of, south side of track; iron post stamped "22.181 B"	22.477
Banta station, in front of freight house; top of rail	27.2
Ellis, 1 mile west of, 4 feet north of milepost 69; iron post stamped "102.656 B" (Recovered by U. S. C. & G. S. in 1919)	102.962

From Ellis south to Day's farm

Ellis, 4.8 miles south of, 1,500 feet west of, at northwest angle of road to Ellis; iron post stamped "265 B"	264.068

TESLA QUADRANGLE

[Latitude 37° 30′–37° 45′; longitude 121° 30′–121° 45′]

ALAMEDA AND SAN JOAQUIN COUNTIES

Primary leveling by S. E. Blout in 1903 and by C. H. Semper in 1905

From Midway westerly along Southern Pacific R. R. to Livermore

	Feet
Midway station, 5 feet east of milepost 64; iron post stamped "351.341 B"	351.459
Milepost 60, 300 feet west of, south side of track, at road crossing; iron post stamped "539.602 B"	539.640
Altamont, 5 feet west of milepost 56; iron post stamped "739.899 B"	739.871
Milepost 52, 5 feet north of; iron post stamped "575.749 B"	575.687

From Livermore easterly along Southern Pacific R. R. to point 5 miles east of Carnegie, thence along highways to Day's farm

T. 3 S., R. 2 E., northwest corner of sec. 23, at junction of Tesla and Mocho roads, east angle; iron post stamped "601 B"	601.317
T. 3 S., R. 2 E., north side of sec. 24, south of road, nearly opposite large farm gate; iron post stamped "688 B"	688.246
T. 3 S., R. 3 E., near center of sec. 20, 6.5 miles west of Tesla; 0.25 mile west of Al Allen's house, south of road, near fence; iron post stamped "B 832"	831.965
T. 3 S., R. 3 E., sec. 27, 3.5 miles west of Tesla, halfway between old Richards mine and house, north of road; iron post stamped "B 1319"	1,319.600
Tesla, 25 feet east of entrance to Tesla Hotel; iron post stamped "No. 11,886 B"	885.253
Tesla, in brick steps of Tesla Hotel; aluminum tablet stamped "882 B"	881.442
T. 3 S., R. 4 E., south side of sec. 29, 2.9 miles east of Tesla, near San Joaquin and Alameda County line, 20 feet south of track, 200 feet east of railroad culvert; iron post stamped "700 B"	699.436

	Feet
T. 3 S., R. 4 E., sec. 35, 1.1 miles east of Carnegie, 20 feet south of track, 5 feet north of road, opposite two old shanties; iron post stamped "540 B"	539.337
From Livermore southeast through Arroyo Mocho to corner of Tps. 4 and 5 S., R. 4 E., thence along Tracy trail to point 1.1 miles east of Carnegie	
T. 3 S., R. 2 E., south side of sec. 36, 6.2 miles east of Livermore, near fence corner, at 48-inch oak tree, north of road; iron post stamped "784 B"	784.090
T. 4 S., R. 3 E., N. E. ¼ sec. 8, at Mud Springs, 50 feet south of water trough, west side of road, at fence; iron post stamped "1412 B"	1,412.336
T. 4 S., R. 3 E., east side of sec. 13, 5.4 miles southeast of Mud Springs, at Fox ranch, at gate across county road, 5 feet west of road at township line; iron post stamped "2428 B 2 S"	2,428.178
T. 5 S., R. 4 E., north side of sec. 5, 600 feet south of Jones house, 20 feet west of road; iron post stamped "2415 B"	2,415.381
T. 4 S., R. 4 E., south side of sec. 10, 3.8 miles north of Corral Hollow Creek, on hogback at very rocky point, 6 feet east of trail; iron post stamped "2233 B"	2,233.349
Precise leveling by the U. S. Coast and Geodetic Survey in 1910–11	
From Midway west along Southern Pacific R. R. to point near Livermore	
Midway, about 1.5 meters east of milepole 63, about 150 meters east of station on south side of track, on Southern Pacific R. R. right of way; Geological Survey iron post stamped "351.341" (U. S. C. & G. S. b. m. O–8)	351.459
Midway, in concrete base of Southern Pacific R. R. signal tower 625; red metal disk (U. S. C. & G. S. b. m. N–8)	422.955
Cayley, 100 meters west of Southern Pacific R. R. milepole 60, 125 meters from east end of Cayley siding, in face of a rocky cut, about 1.2 meters above track; red metal disk (U. S. C. & G. S. b. m. M–8)	493.427
Altamont, at Southern Pacific R. R. mileage 57.9, on north side of east entrance to Southern Pacific tunnel No. 1, about 0.2 meter from end of tunnel and 1 meter above track; red metal disk (U. S. C. & G. S. b. m. L–8)	590.632
Altamont, 0.5 mile east of, on south abutment to Western Pacific R. R. crossing over Southern Pacific track, about 1 meter above Southern Pacific track; red metal disk (U. S. C. & G. S. b. m. K–8)	719.237
Altamont, about 60 meters east of Southern Pacific R. R. station, between Southern Pacific main track and county pike, abreast of derailing switch to siding; Geological Survey iron post stamped "739.899" (U. S. C. & G. S. b. m. J–8)	739.871
Altamont, at Southern Pacific R. R. mileage 53.7, on south head wall of Southern Pacific culvert 53G, about 0.6 meter below the track; red metal disk (U. S. C. & G. S. b. m. I–8)	716.107
Livermore, at Southern Pacific R. R. mileage 52.2, on north abutment of overhead crossing of Western Pacific R. R. over Southern Pacific R. R., about 1.2 meters above Southern Pacific track; red metal disk (U. S. C. & G. S. b. m. H–8)	640.688
Livermore, about 2 miles east of, at Southern Pacific R. R. mileage 49.1, on south abutment of overhead crossing of Western Pacific R. R. over Southern Pacific R. R., about 1 meter above Southern Pacific track; red metal disk (U. S. C. & G. S. b. m. G–8)	537.128

DEGREE QUADRANGLE 37°–38°, 122°–123°

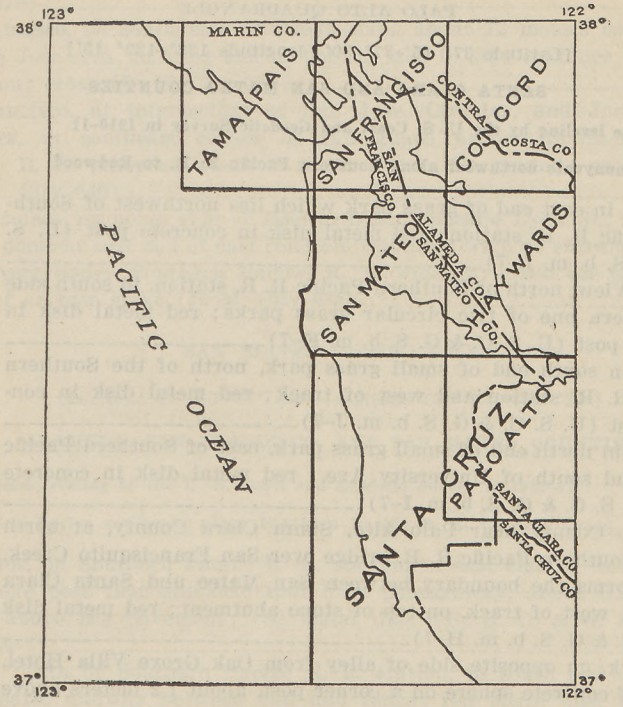


FIGURE 36.—Diagram of degree quadrangle 37°–38°, 122°–123°

CONCORD QUADRANGLE

[Latitude 37° 45′–38°; longitude 122°–122° 15′]

CONTRA COSTA COUNTY

Primary leveling by J. A. Vogleson in 1896

From Martinez southeast along highway through Pacheco to Concord

	Feet
Pacheco, brick building with iron shutters, formerly a warehouse, owned by G. Anderson, third building north of road to Concord and post office; iron piece projecting from wall, U. S. C. & G. S. b. m	21.495
Pacheco, 0.75 foot south of preceding bench mark, in wall of same building; bronze tablet stamped "21"	21.480
Concord railroad station; top of rail at road crossing	42.3
Concord, west corner of public square, southeast of intersection of Main St. with street running by Kline's Hotel; iron post stamped "65"	64.953

From Danville north along road to Pacheco

	Feet
Alamo, east side of Main St., north side of lane to railroad ranch, opposite hotel and post office; iron post stamped "270"	270.646
Walnut Creek, in school yard, between eucalyptus trees, near east fence; iron post stamped "151"	150.937

PALO ALTO QUADRANGLE

[Latitude 37° 15′–37° 30′; longitude 122°–122° 15′]

SANTA CLARA AND SAN MATEO COUNTIES

Precise leveling by the U. S. Coast and Geodetic Survey in 1910–11

From Sunnyvale northwest along Southern Pacific R. R. to Redwood

	Feet
Sunnyvale, in east end of grass park which lies northwest of Southern Pacific R. R. station; red metal disk in concrete post (U. S. C. & G. S. b. m. L–7)	97.769
Mountain View, north of Southern Pacific R. R. station, in south side of northern one of two circular grass parks; red metal disk in concrete post (U. S. C. & G. S. b. m. K–7)	77.598
Mayfield, in south end of small grass park, north of the Southern Pacific R. R. station and west of track; red metal disk in concrete post (U. S. C. & G. S. b. m. J–7)	32.838
Palo Alto, in north end of small grass park, east of Southern Pacific R. R. and south of University Ave.; red metal disk in concrete post (U. S. C. & G. S. b. m. I–7)	62.080
San Mateo County near Palo Alto, Santa Clara County, at north end of Southern Pacific R. R. bridge over San Francisquito Creek, which forms the boundary between San Mateo and Santa Clara counties, west of track, on top of stone abutment; red metal disk (U. S. C. & G. S. b. m. H–7)	73.523
Menlo Park, on opposite side of alley from Oak Grove Villa Hotel, in top of concrete sphere on a corner post, about 1.2 meters above the ground; red metal disk (U. S. C. & G. S. b. m. G–7)	70.633
Redwood, north of Southern Pacific R. R. station, in north corner of triangular grass park; red metal disk in concrete post (U. S. C. & G. S. b. m. F–7)	12.713

SAN FRANCISCO QUADRANGLE

[Latitude 37° 45′–38°; longitude 122° 15′–122° 30′]

ALAMEDA, CONTRA COSTA, SAN FRANCISCO, AND SAN MATEO COUNTIES

Primary leveling by J. A. Vogleson in 1896

From Oakland Point to Oakland, thence north along Southern Pacific R. R. to Sobrante

	Feet
Oakland Point, 30.5 feet from corner of machine shop, 19 feet from corner of office of Southern Pacific Co., 1 foot from west edge of walk from railroad track to machine shop and 9 feet south from west side of doorway, 0.4 foot underground; Southern Pacific Co.'s bench mark on top of a 30-foot bar of railroad iron driven in solid ground by a pile driver (afterwards covered with a wooden platform with a hole bored through the planking for access)	7.920
Oakland, Broadway front of Hall of Records, in foundation on north side of entrance, 4 feet above ground; bronze tablet stamped "24"	24.112

Precise leveling by the U. S. Coast and Geodetic Survey in 1910–11

At San Francisco

	Feet
San Francisco, on north side of Sickles Ave., on left of entrance to No. 110 Sickles Ave., 35 meters west of Huron Ave., on cement surface at west end of iron gate; cross (U. S. C. & G. S. b. m. City 418)	310.987
San Francisco, on south side of Ocean Ave., about 12 meters east of San Jose Ave., at west end of bottom step to side entrance to a saloon; cross (B. M. City 386)	192.457
San Francisco, at intersection of San Jose, Circular, and Joost avenues, at southeast corner of rail guard around Southern Pacific R. R. gatepost, about 1 meter above the ground; cross (B. M. City 640)	194.852
San Francisco, on north side of Bosworth St., opposite Lyell St., in top of dome at east end of east concrete retaining wall, at entrance to culvert under Southern Pacific R. R. viaduct; cross on the head of an iron spike (B. M. City 635)	159.314

SAN MATEO QUADRANGLE

[Latitude 37° 30′–37° 45′; longitude 122° 15′–122° 30′]

ALAMEDA, SAN FRANCISCO, AND SAN MATEO COUNTIES

Precise leveling by the U. S. Coast and Geodetic Survey in 1910–11

From San Carlos northwest along Southern Pacific R. R. to Holy Cross

	Feet
San Carlos, on Southern Pacific R. R. station, in east side of eastern stone post that supports roof over passageway, about 0.23 meter above the pavement; red metal disk (U. S. C. & G. S. b. m. E–7)	25.741
Belmont, north of Southern Pacific R. R. station, in south end of grass park, midway between rail and fence; red metal disk in concrete post (U. S. C. & G. S. b. m. D–7)	34.810
Beresford, about 300 meters north of Southern Pacific R. R. station, west of track, in the concrete foundation of signal tower 202; red metal disk (U. S. C. & G. S. b. m. C–7)	22.923
San Mateo, at east entrance to small park at Southern Pacific R. R. passenger station, in top of concrete wall, about 0.3 meter north of the north pillar; red metal disk set in cement (U. S. C. & G. S. b. m B–7)	27.392
San Mateo, on Ellsworth Ave., about half a mile north of Southern Pacific R. R. station, in south side of F. A. M. building, about 3 meters from southeast corner and about 1 meter above the ground; red metal disk (U. S. C. & G. S. b. m. A–7)	25.837
Burlingame, on east side of Southern Pacific R. R. station, under ticket window, in foundation, about 0.15 meter above the pavement; red metal disk (U. S. C. & G. S. b. m. Z–6)	30.538
Millbrae, in east wall of power substation, about 1 meter from northeast corner and about 1.5 meters above the brick pavement; red metal disk (U. S. C. & G. S. b. m. Y–6)	18.432
San Bruno, about 15 meters northeast of Southern Pacific R. R. station, signal tower 108; top of southern inside base bolt (U. S. C. & G. S. b. m. X–6)	26.713

	Feet
Holy Cross, north of stone building at entrance to Holy Cross Cemetery, between Southern Pacific R. R. track and the street, on east side of the fountain, on east side of a large conical rock; red metal disk (U. S. C. & G. S. b. m. W–6)	88.205

SANTA CRUZ QUADRANGLE

[Latitude 37°–37° 30′; longitude 122°–122° 30′]

SAN MATEO, SANTA CLARA, AND SANTA CRUZ COUNTIES

Primary leveling by C. C. Ward in 1899

From Los Gatos southwest along road to Boulder Creek

	Feet
Montezuma School, 45 feet north of, in corner of yard; iron post stamped "1459 S F"	1,458.800
T. 9 S., R. 2 W., at center of NE. ¼ sec. 12, 30 feet south of Brown School; iron post stamped "2135 S F"	2,134.700
Bear Creek School, 10 feet north of northwest corner of; iron post stamped "735 S F"	734.700
Boulder Creek, in yard of Boulder Creek House, at east side of fountain; iron post stamped "484 S F"	483.615

From Boulder Creek northwest along wagon road and trail to Iverson's ranch

Sequoia School, in yard, at south side of stile; iron post stamped "916 S F"	915.625
Butano Ridge, at end of wagon road; iron post stamped "2319 S F"	2,318.580
Iverson's ranch, at junction of Boulder Creek and Pescadero Creek trail with road to La Honda, west side of road; iron post stamped "422 S F"	421.599

From La Honda north to divide between La Honda Creek and Santa Clara Valleys

La Honda, north side of front entrance to hotel, at steps; iron post stamped "403 S F"	402.621
Summit of divide between La Honda Creek and Santa Clara Valleys, in forks of road, at northwest corner of saloon; iron post stamped "1680 S F"	1,679.050

From Brown School north along road to sec. 36, T. 8 S., R. 2 W.

T. 8 S., R. 2 W., sec. 36, at junction of road leading north with reservoir road, near county line, in Mrs. Gist's yard, at north side of gate; iron post stamped "2256 S F"	2,255.559

From Boulder Creek south along road to Santa Cruz

Ben Lomond, 10 feet from northwest corner of office of Rowardemen Hotel, in yard; iron post stamped "344 S F"	343.530
Felton School, midway between two front entrances; iron post stamped "286 S F"	285.388
Santa Cruz, at entrance to court house, in left base of arch; aluminum tablet stamped "18 S F"	17.559

From Iverson's ranch west along pipe line to Tar Creek

T. 8 S., R. 4 W., east side of sec. 1, 0.2 mile west of Tar Creek, at right of pipe-line trail, in heavy timber; iron post stamped "420 S F"	420.035

From Iverson's ranch north to Alpine School, thence west to La Honda

	Feet
Alpine School, 0.25 mile west of, in triangle at junction of Mayfield and La Honda road with Page Mill road; iron post stamped "1590 S. F."	1,590.009

From Santa Clara-La Honda Creek divide northeast to Palo Alto

Portola, junction with road to, at corner of fence surrounding E. K. Preston's house, on south side of road; iron post stamped "388 S F"	388.010
Leland Stanford Junior University, on south side of inner quadrangle, on south side of west building, west of cellar steps, on top of stone ledge, next to wall; aluminum tablet stamped "89 S F"	88.577

From Redwood southeast along county road to San Jose

Redwood, at northeast corner of Sixth and Arguello streets, opposite Southern Pacific Co.'s station, top of fire hydrant (C. & G. S. bench mark given as 15.412 feet above mean lower low water)	12.312
Palo Alto, at northeast corner of station, on iron rail surrounding walk, which rail is set in brick and cement (established by the Coast and Geodetic Survey and the elevation given as 63.327)	63.360

From Del Mar west to Santa Cruz, thence north 3 miles

Seabright, in front of station; top of rail	46.8
Santa Cruz, 0.9 mile north of station, at southeast corner of San Lorenzo River bridge, in guard rail; bolt head painted "U. S. 28 B. M. No. 45"	28.14
Santa Cruz, at junction of south line of Pacific St. and west line of Washington St.; iron post stamped "S. F. 14 1908 26" (reset in 1912)	13.770
Santa Cruz, east side of entrance to Santa Cruz County courthouse, in base of arch; aluminum tablet stamped "S. F. 18"	17.559
Santa Cruz, northwest corner of brick building facing Pacific Ave., next building south of courthouse; aluminum tablet stamped "S. F. 18 1908 27"	17.269
Santa Cruz, 2.8 miles north of, west of the cement culvert; chiseled circle, painted "U. S. 170 B. M. No. 47"	169.50

TAMALPAIS QUADRANGLE

[Latitude 37° 45′–38°; longitude 122° 30′–122° 45′]

MARIN COUNTY

Primary leveling by L. D. Ryus in 1899–1900

From San Geronimo southeast along Northwestern Pacific R. R. to San Rafael

	Feet
Fairfax, in front of station; top of rail	109.5
San Rafael, railroad station, foot of northeast corner of shed over track, northeast corner of cap (Coast and Geodetic Survey bench mark, 12.175 feet above mean lower low tide)	9.344

DEGREE QUADRANGLE 38°–39°, 118°–119°

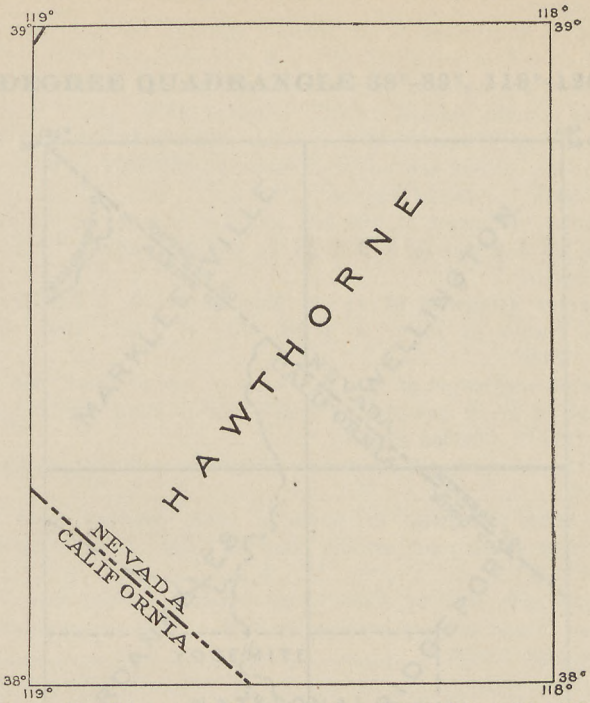


FIGURE 37.—Diagram of degree quadrangle 38°–39°, 118°–119°

HAWTHORNE QUADRANGLE

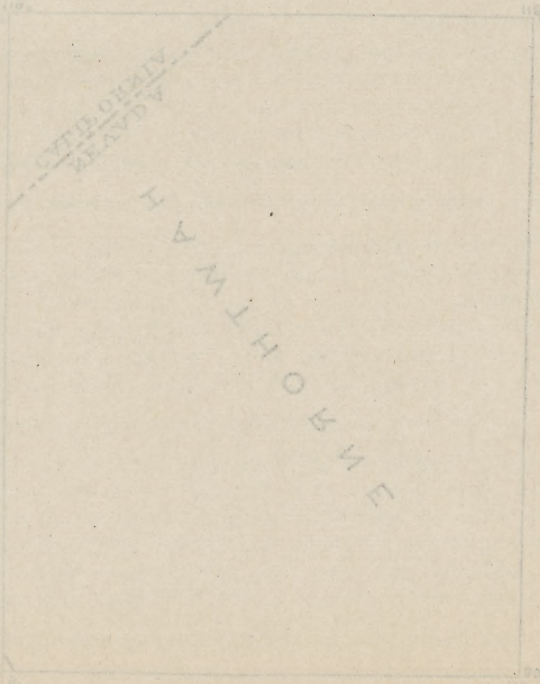
[Latitude 38°–39°; longitude 118°–119°]

MONO COUNTY

Primary leveling by C. R. Smith in 1898 and C. N. Weston in 1909

From State line on Hawthorne-Bodie road to Bodie

	Feet
Fletcher, 8.1 miles southwest of, on California-Nevada State line, survey of 1873, 25 feet south of milepost 283, at Sunshine, 300 feet east of old stone house, 15 feet north of road; iron post stamped "7524"	7,517.124
Fletcher, 10.3 miles southwest of, at Gregory's ranch, southwest of house, 20 feet east of road, on ledge painted "7821"; chiseled square	7,814.12
Fletcher, 10.9 miles southwest of, opposite old stamp mill on south side of road, in face of high ledge, 20 feet north of northwest corner of ledge; aluminum tablet stamped "7908"	7,900.951
Bodie, 4 miles northeast of, 6 feet east of road, between Bodie Creek and road, 3 feet north of telephone pole, on boulder painted "8018"; chiseled square	8,010.95
Bodie, 2.7 miles east of, in front wall of H. C. Blanchard's stone house at tollgate, 6 feet west of southeast corner of house; aluminum tablet stamped "8133"	8,125.944


ALTITUDE
ARCADIA
TYMTHORNE

DEGREE QUADRANGLE 38°–39°, 119°–120°

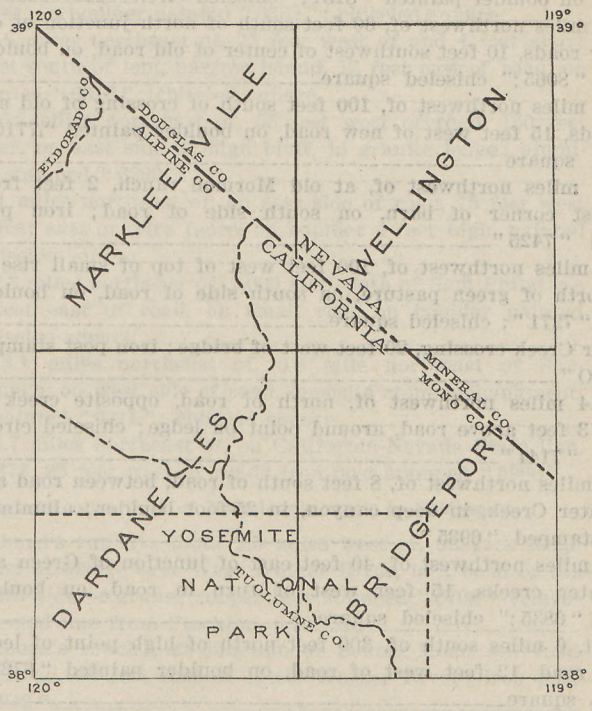


FIGURE 38.—Diagram of degree quadrangle 38°–39°, 119°–120°

BRIDGEPORT QUADRANGLE

[Latitude 38°–38° 30′; longitude 119°–119° 30′]

MONO AND TUOLUMNE COUNTIES

Primary leveling by C. R. Smith in 1898 and C. M. Weston in 1909

From Bodie along stage road to Bridgeport, thence northwest along stage road to State line

	Feet
Bodie, 1.1 miles east of, 50 feet east of first dam above stamp mill, 10 feet south of road, on boulder painted "8303;" chiseled square	8,296.17
Bodie, northwest corner of Main and Green streets, 3 feet from hydrant, between two large wooden posts; iron post stamped "8375"	8,368.381
Bodie, 1.2 miles northwest of, about 1,000 feet southwest of summit in road, on east side of road, on boulder painted "8462;" chiseled square	8,454.85

	Feet
Bodie, 2.2 miles northwest of, 200 feet west of bend in road around point, on southwest side of road, on boulder painted "8326;" chiseled square	8,319.43
Bodie, 3.5 miles northwest of, at Murphy Springs, on east side of road, 10 feet east of watering tub; iron post stamped "8112"	8,105.049
Bodie, 4.7 miles northwest of, east of summit in road, 10 feet north of road, on boulder painted "8131;" chiseled circle	8,123.74
Bodie, 6.1 miles northwest of, 30 feet south of north junction of old and new roads, 10 feet southwest of center of old road, on boulder painted "8065;" chiseled square	8,058.28
Bodie, 7.5 miles northwest of, 100 feet south of crossing of old and new roads, 15 feet west of new road, on boulder painted "7716;" chiseled square	7,709.40
Bodie, 8.7 miles northwest of, at old Mormon ranch, 2 feet from northwest corner of barn, on south side of road; iron post stamped "7425"	7,418.182
Bodie, 10 miles northwest of, 100 feet west of top of small rise in road, north of green pasture, on south side of road, on boulder painted "7271"; chiseled square	7,264.14
Clearwater Creek crossing, 20 feet west of bridge; iron post stamped "7196 O"	7,199.750
Bodie, 10.4 miles northwest of, north of road, opposite creek in canyon, 3 feet above road, around point on ledge; chiseled circle, painted "7141"	7,134.29
Bodie, 12 miles northwest of, 8 feet south of road, between road and Clearwater Creek, in deep canyon, in 25-foot boulder; aluminum tablet stamped "6935"	6,928.224
Bodie, 13 miles northwest of, 40 feet east of junction of Green and Clearwater creeks, 15 feet west of turn in road, on boulder painted "6835;" chiseled square	6,828.31
Bridgeport, 6 miles south of, 300 feet north of high point of ledge east of road, 12 feet west of road, on boulder painted "6723;" chiseled square	6,716.50
Tollgate, Bridgeport-Bodie road, near northeast corner of house; iron post stamped "6643 O"	6,646.205
Bridgeport, 2.7 miles south of, on south slope of low ridge, 15 feet west of road, on low ledge painted "6505"; chiseled square	6,498.40
Bridgeport, 1 mile south of, 175 feet west of culvert, on west side of road, in base of first telephone pole south of pasture gate, painted "6471;" spike	6,463.63
Bridgeport, at southwest corner of courthouse; iron post stamped "6465 O"	6,467.936
Bridgeport, 2.4 miles east of, 150 feet east of corner of pasture fence, on north side of road, 5 feet north of fence and on edge of dry channel, on boulder painted "6448"; chiseled square	6,440.75
Bridgeport, 2.9 miles east of, at Stewart's ranch, 3 feet south of corner fence post, at west turn from main road; iron post stamped "6449"	6,442.186
Bridgeport, 3.8 miles northeast of, 70 feet north of dry channel, 25 feet west of road, on boulder painted "6465"; chiseled square	6,458.55
Bridgeport, 5 miles northeast of, 200 feet east of river and 15 feet west of road, on boulder 1 foot high, painted "6431"; chiseled square	6,423.75

	Feet
Bridgeport, 5.9 miles northeast of, about 900 feet east of old ranch, in field on north side of road, 10 feet north of fence, on large boulder painted "6416"; chiseled square	6,408.92
Bridgeport, 6.7 miles northeast of, 400 feet southwest of bridge over East Walker River, 25 feet east of road, at foot of high cliff, in large boulder; aluminum tablet stamped "6398"	6,390.966
Bridgeport, 7.5 miles northeast of, 5 feet north of road, about 50 feet north of river, on boulder painted "6362"; chiseled square	6,347.86
Bridgeport, 8.6 miles northeast of, 25 feet west of and 4 feet above river, 75 feet south of long narrow island, 12 feet east of road, on boulder painted "6312"; chiseled square	6,304.70
Bridgeport, 10.2 miles northeast of, 55 feet west of road, 130 feet west of river, on east side of high bluff, in granite ledge; aluminum tablet stamped "6202"	6,195.221
Bridgeport, 11 miles northeast of, on east side of road, 75 feet west of river, 3 feet east of wire fence, on boulder 4 feet high, painted "6132"; chiseled square	6,125.32
Bridgeport, 12.3 miles northeast of, 1,000 feet south of Sam Philatro's ranch, 15 feet east of road, on small rise, on boulder painted "6066"; chiseled square	6,058.67
Bridgeport, 13.1 miles northeast of, 0.6 mile northeast of Sam Philatro's ranch, on west side of road, opposite stone embankment, on boulder painted "6011"; chiseled square	6,003.61
Bridgeport, 13.7 miles northeast of, on California-Nevada State line, survey of 1873, 25 feet west of road; iron post stamped "5966"	5,949.165
From point 2.5 miles west of Blackburn's ranch to Bridgeport	
Hardy (Blackburn's ranch), about 2.5 miles west of, on rock ledge 1,400 feet east of bridge over West Walker River, in a bend of the road, on south side of grade; copper bolt stamped "6703" (elevation by corrected line from Stockton, 6,702.518)	6,705.274
Hardy (Blackburn's ranch), at junction of Sonora-Mono toll road and Carson Road, 60 feet east of Little Walker River; iron post stamped "6942"	6,944.279
Summit between Blackburn's ranch and Bridgeport, 15 feet east of road; iron post stamped "7540 O"	7,543.276
Hunttoon station, on right side of road, 100 feet below water trough; iron post stamped "6837 O"	6,840.478
Bridgeport, 3 miles northwest of, east side of road, at north side of Sinnimon's Lane; iron post stamped "6496 O"	6,499.047
From point 10 miles southwest of Bridgeport via State road to Mono Lake	
Bridgeport, 10 miles southeast of, at sheep camp, 50 feet above water trough across road; iron post stamped "7350 O"	7,353.436
Hector's station, on Bodie-Lundy road, across road from dwelling house, at edge of orchard and garden; iron post stamped "6760 O"	6,764.138
Jordan Creek crossing of Bodie-Lundy road, 150 feet southwest of bridge, on north side of road; iron post stamped "6779 O"	6,782.386
Mono, 4 feet east of southwest corner of sec. 19, T. 2 N., R. 26 E., about midway between post office and schoolhouse, on hillside about 350 feet in elevation above lake and about 2,000 feet in horizontal distance from lake shore; iron post stamped "6761 O"; witnessed by mound of rocks	6,765.450

	Feet
Mono Lake; surface of water July 27, 1898	6,417.0
Mono Lake; surface of water November 27, 1914	6,423.8
From Mono Lake north along highway to Clearwater Creek at a point 10.2 miles southeast of Bridgeport. (The connection was proved by rerunning a portion of Weston's line from the point tied to)	
Mono Lake, about one-fourth of a mile north of, 330 feet north of schoolhouse, on east side of road, on small granite boulder; chiseled circle, painted "U. S. B. M. 6520"	6,514.57
Mono Lake, 1.5 miles north of, in corner fence post, west side of road; spike, painted "U. S. B. M. 6788"	6,782.67
Mono Lake, 2.35 miles north of, 1,565 feet north of Mill Creek, 275 feet north of road junction, 15 feet east of road, on a low granite boulder; chiseled circle, painted "U. S. B. M. 6940"	6,934.68
Jordan Creek, crossing of Bodie-Lundy road, 150 feet southwest of bridge, north side of road; iron post stamped "6779 O"	6,782.386
Clearwater Creek crossing, 9.18 miles south of, 320 feet north of road junction which is about 0.5 mile east of Conway's ranch, between road and dry bed of Bacon Gulch, on flat granite boulder; point in chiseled hole, marked "6922"	6,916.35
Clearwater Creek crossing, 7.65 miles south of, in creek, where Bacon Gulch makes a sharp turn east; top of smooth granite rock, marked "U. S. B. M. 7360"	7,354.51
Clearwater Creek crossing, 6.80 miles south of, on south side of old road where it crosses a small spur that runs into Bacon Gulch from the south, on low granite boulder; chiseled circle, marked "7899"	7,893.28
Clearwater Creek crossing, 5.91 miles south of, in northwest corner sec. 25, T. 3 N., R. 25 E., on top of hill west of old "Mono Diggings," in smooth granite boulder; aluminum tablet, stamped "8410 Va"	8,413.842
Clearwater Creek crossing, 5.15 miles south of, in saddle, on a flat granite boulder; chiseled circle, marked "U. S. B. M. 8245"	8,239.93
Clearwater Creek crossing, 4.36 miles south of, 90 feet north of road, 100 feet northeast of old road forks, on top of granite boulder; chiseled circle, painted "U. S. B. M. 8304"	8,298.44
Clearwater Creek crossing, 3.17 miles south of, 4 feet east of road, on a low boulder; chiseled circle, painted "U. S. B. M. 7853"	7,847.80
Sharp rock at road fork, painted "7602"	7,596.52
Clearwater Creek crossing, 2.13 miles south of, 4 feet east of road, 100 feet northeast of rocky dike on hillside, on a low embedded rock; chiseled circle, painted "U. S. B. M. 7565"	7,559.55
Clearwater Creek crossing, 0.87 mile south of, 95 feet east of road, on east side of creek; top of low sharp rock, painted "U. S. B. M. 7349"	7,343.18
Clearwater Creek crossing, 10.2 miles southeast of Bridgeport, 25 feet west (not north) of bridge, between road and creek; iron post, stamped "7196 O" (bridge has been moved)	7,199.750
From Clearwater Creek south along road via Sheep Camp and Hector to Jordan Creek crossing of Bodie and Lundy Road	
Sheep Camp, across road from water trough and 50 feet above it; iron post stamped "7350 O"	7,353.436

Feet

Hectors station, on Bodie and Lundy road, across road from the dwelling house, at edge of orchard and garden; iron post stamped "6760 O"---------- 6,764.138

DARDANELLES QUADRANGLE

[Latitude 38°–38° 30′; longitude 119° 30′–120°]

ALPINE, MONO, AND TUOLUMNE COUNTIES

Primary leveling by J. B. Lippincott in 1896

From point 2.5 miles northeast of Parsons northeast to Eureka Valley

Feet

Cow Creek, 50 feet east of crossing of, south of road, in side of large boulder; bronze tablet stamped "5769"---------- 5,771.603

T. 5 N., R. 18 E., 2 feet north of southeast corner of sec. 15, north of road, between mileposts 30 and 31, 6 feet from sugar-pine tree marked "B. T. 60° E. 5 feet"; iron post stamped "5943"---------- 5,945.362

Mill Creek, 200 feet east of crossing, on north side of road, trees blazed in vicinity; iron post stamped "6273"---------- 6,275.031

Niagara Creek, 150 feet north of crossing, in large granite boulder, the highest one of the group, trees blazed in vicinity; copper bolt stamped "6530"---------- 6,532.146

T. 6 N., R. 19 E., sec. 31, summit between Niagara Creek and Stanislaus River, at head of grade and about 2,000 feet north of Niagara Creek crossing, in granite rock on north side of road, 4 feet above road level, on southwest face of rock; bronze tablet stamped "6638"---------- 6,640.039

T. 6 N., R. 19 E., sec. 23, about 2 miles southwest from Brightmans Flat, at level road below Pattersons grade, on south side of road, in pyramid-shaped rock 6 feet high; bronze tablet stamped "5664"- 5,666.631

Stanislaus River, 28 feet northwest from northwest corner of bridge, about 2 miles west from Douglas ranch, 6 feet above road level, in granite ledge; copper plug stamped "5828"---------- 5,830.434

Eureka Valley, 6 feet south of southwest corner of Douglas ranch; iron post stamped "6076"---------- 6,078.403

From Eureka Valley east via Sonora Pass to point near Hardy station

Bakers station, about 0.25 mile southeast of, 180 feet east of road and 93 feet south of blazed yellow pine, on rock bench at the foot of and west side of grade; bronze tablet stamped "6265"---------- 6,267.733

Sonora Pass, 3 miles west of, 1,000 feet west of second crossing of creek, on a rock ledge on west of road, trees blazed in vicinity; copper bolt stamped "8398"---------- 8,401.516

Sonora Pass, at summit, south side of road; iron post stamped "9623"---------- 9,527.220

Sonora Pass, 3.5 miles east of summit, just west of large canyon on south, at mule corral south of road; iron post stamped "8583"---- 8,586.628

Crinoline grade, foot of, 10 miles west of Hardy station and 1,360 feet west of Leavitt's chimney, between the road and fence, on top of boulder 9 feet high and 10 feet in diameter, on south side of road; copper bolt stamped "7152"---------- 7,154.388

DEGREE QUADRANGLE 38°–39°, 120°–121°

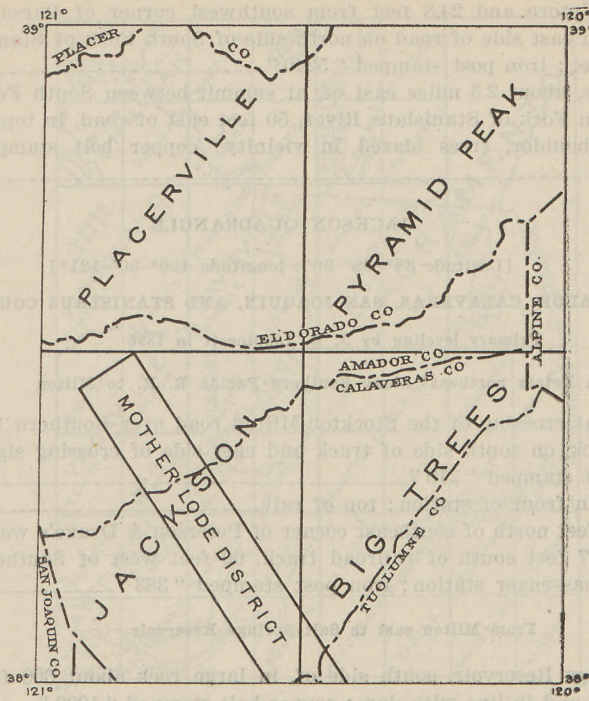


FIGURE 39.—Diagram of degree quadrangle 38°–39°, 120°–121°

BIG TREES QUADRANGLE

[Latitude 38°–38° 30′; longitude 120°–120° 30′]

ALPINE, AMADOR, CALAVERAS, AND TUOLUMNE COUNTIES

Primary leveling by J. B. Lippincott in 1896

From point near Soulsbyville northeast along road to Parsons, thence northeast 2.5 miles

	Feet
Columbia road, in triangle at junction; iron post stamped "3254"	3,254.990
Sugarpine, about 800 feet east of post office, on rock 12 by 6 feet, 4 feet high, in corral; copper bolt stamped "4468"	4,469.806
Sugarpine, about 2.5 miles east of, in forks of road to Hale's sawmill; iron post stamped "4916"	4,918.306
Genesee place (Saints' Rest), in rock 3.5 by 2.5 feet, 1.5 feet high, 10 feet east of barn, 10 feet south of road, 150 feet north of creek, on west edge of a group of trees; copper bolt stamped "5139"	5,140.741
Ball Mountain summit, between North Fork of Tuolumne and South Fork of Stanislaus rivers, on north side of road, about 6 miles west of Strawberry, at the northeast head of draw, on large boulder; bronze tablet stamped "5624"	5,626.008

	Feet
Cold Spring, about 0.75 mile west of, at summit between North Fork of Tuolumne and South Fork of Stanislaus rivers, at bend of road; iron post stamped "5697"	5,699.034
Parsons (Strawberry), 48.8 feet southeast from southeast corner of Parson's store and 24.8 feet from southwest corner of Parson's house, on east side of road on north side of South Fork of Stanislaus River; iron post stamped "5240"	5,241.740
Strawberry, about 2.5 miles east of, at summit between South Fork and Main Fork of Stanislaus River, 50 feet east of road, in top of granite boulder, trees blazed in vicinity; copper bolt stamped "6134"	6,136.498

JACKSON QUADRANGLE

[Latitude 38°–38° 30′; longitude 120° 30′–121°]

AMADOR, CALAVERAS, SAN JOAQUIN, AND STANISLAUS COUNTIES

Primary leveling by J. B. Lippincott in 1896

From Peters northeast along Southern Pacific R. R. to Milton

	Feet
Waverly, at crossing of the Stockton-Milton road over Southern Pacific track, on south side of track and east side of crossing sign; iron post stamped "219"	218.840
Waverly, in front of station; top of rail	215.8
Milton, 9 feet north of southeast corner of Peterson & Drake's warehouse, 57 feet south of railroad track, 60 feet west of Southern Pacific passenger station; iron post stamped "383"	382.966

From Milton east to Salt Springs Reservoir

Salt Springs Reservoir, south side of, in large rock about 600 feet south of and in line with dam; copper bolt stamped "1092"	1,092.428

From Salt Springs southeast via Copperopolis

Copperopolis, about 2.5 miles north of, east side of road, at a summit between Salt Spring Valley and Copperopolis, at an oblique corner of fence; iron post stamped "1108"	1,108.308

Primary leveling by L. F. Biggs in 1907

From Carbondale northeast 4 miles, thence northwest to point 2 miles east of Michigan Bar

Michigan Bar, 3.6 miles east of, north side of road, 15 feet south of fence; iron post stamped "BB 1907 5 255"	255.409

DEGREE QUADRANGLE 38°–39°, 121°–122°

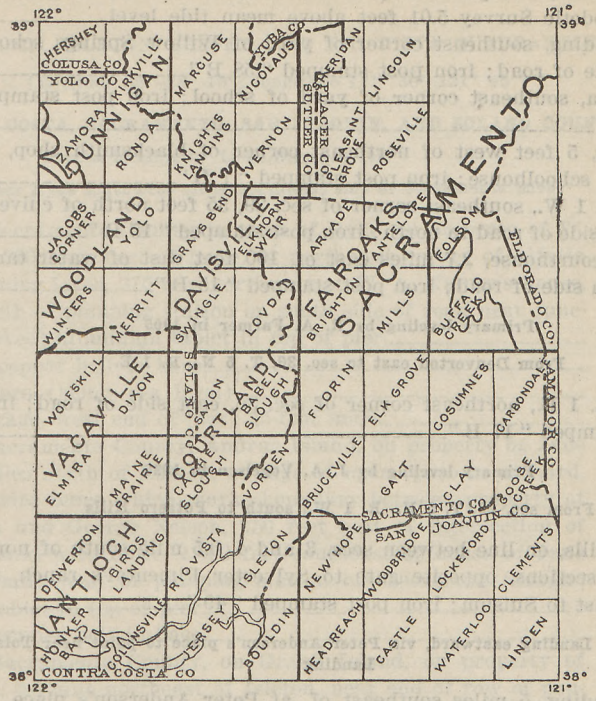


FIGURE 40.—Diagram of degree quadrangle 38°–39°, 121°–122°

ANTIOCH QUADRANGLE

[Latitude 38°–38° 15′; longitude 121° 45′–122°]

CONTRA COSTA AND SOLANO COUNTIES

Precise leveling by L. F. Biggs in 1908

From Madison's blacksmith shop, 3.5 miles southwest of Rio Vista, in Rio Vista quadrangle, along highways south to Toland Landing, thence west along north side of Sacramento River to Collinsville, thence north to Denverton, thence west to Fairfield, in Carquinez quadrangle (adjustment in this line 0.000)

	Feet
Toland Landing, 12-foot mark, United States water gage	8.843
Toland Landing, 12-foot mark, California water gage	7.080
Toland Landing, 2.2 miles west of; iron post (U. S. E. D. b. m. No. 44)	15.716
Toland Landing, 3.0 miles west of, north side of road, 1 foot south of fence line, 8 feet east of gate, 0.2 mile east of feeding shed, 100 feet north of slough; iron post stamped "10 B"	10.545
Stratton ranch, summit of small hill, in top of pier 2; aluminum tablet	38.472
Stratton ranch, summit of small hill, in base of pier 2; copper bolt	34.742

	Feet
Collinsville, 12-foot mark, United States water gage	5.133
Collinsville, 10-foot mark, California water gage	6.050
Collinsville, 0.5 mile north of, at crossroads, southwest corner of schoolhouse; iron post stamped "5 B." (Elevation by U. S. Coast and Geodetic Survey 5.01 feet above mean tide level	5.509
Birds Landing, southeast corner of yard of Willow Springs school, west side of road; iron post stamped "58 B"	58.273
Montezuma, southeast corner of yard of school; iron post stamped "41 B"	41.731
Denverton, 5 feet west of northeast corner of blacksmith shop, in front of schoolhouse; iron post stamped "7 B"	7.141
T. 5 N., R. 1 W., southeast corner of sec. 29, 35 feet north of culvert, on east side of road to north; iron post stamped "15 B"	15.270
Fairfield courthouse, 2.7 miles east of, 100 feet east of water tank, on south side of road; iron post stamped "15 B"	15.183
Primary leveling by R. A. Farmer in 1905	
From Denverton east to sec. 36, T. 5 N., R. 1 E.	
T. 5 N.. R. 1 E., northeast corner of sec. 36, east side of road; iron post stamped "17 B"	17.811
Primary leveling by J. A. Vogelson in 1896	
From sec. 29, T. 5 N., R. 1 W., south to Potrero Hills	
Potrero Hills, on line between secs. 3 and 4, 0.5 mile south of north line of sections, opposite gate to Sylvester Pimental's ranch, 5.5 miles east to Suisum; iron post stamped "49"	49.529
From Birds Landing eastward, via Peter Anderson's place to point near Toland Landing	
Birds Landing, 5 miles southeast of, at Peter Anderson's place, 10 feet west of gate to barn, on south side of road; iron post stamped "110 B"	110.743
Primary leveling by R. A. Farmer in 1905	
From sec. 35, T. 5 N., R. 1 E., southeast to Rio Vista	
T. 4 N., R. 2 E., corner of secs. 3, 4, 9, and 10, 300 feet southwest of M. Egbert's white house, west side of road; iron post stamped "32 B"	32.327
T. 4 N., R. 2 E., corner of secs. 11, 12, 13, and 14, east side of road; iron post stamped "19 B"	19.360
From Concord north along road to Bay Point, thence east along Southern Pacific R. R. to Black Diamond	
McAvoys siding, in corner of fence southwest from southwest corner of warehouse; iron post stamped "22"	23.308
Pittsburg, Black Diamond, in primary school yard, near Contra Costa Bank; iron post stamped "21"	20.736
Pittsburg, Black Diamond Hotel, tack on porch of, midway between two doors, 4 inches from side of house[1]	7.736

[1] The above bench mark is, as nearly as could be determined, the datum of the level system of the State engineering department, the elevation of which above the mean "lowest low tide," as resulting from tidal observations made at New York Landing during the months of October, November, and December, 1878, is 11.22 feet.

From Cornwall east along Southern Pacific R. R. to Antioch

	Feet
Antioch School, in rear wall of foundation; bronze tablet stamped "35"	35.745
Antioch, in front of station; top of rail	43.9

BOULDIN, ISLETON, JERSEY, AND RIO VISTA QUADRANGLES

[Latitude 38°–38° 15′; longitude 121° 30′–121° 45′]

CONTRA COSTA, SACRAMENTO, SAN JOAQUIN, AND SOLANO COUNTIES

Precise leveling by L. F. Biggs in 1907

From point near Ryde southwest along northwest side of Sacramento River

	Feet
Pier No. 10, Sacramento County, in town of Ryde, on property of W. A. Kesner, 250 feet west of levee, in northwest corner of alfalfa patch adjoining levee, 375 feet northwest of W. A. Kesner's house, 750 feet north of pumping station on south side of road near junction with levee; aluminum tablet in top of pier	7.916
Pier No. 10; copper bolt in base	4.321
Ryde; gage zero (below sea level)	—4.066
Ryde, water gage, west end of pier; 15-foot mark	10.934
Pier No. 9, Sacramento County, Andrus Island, on property of Jane Smith, 4 miles north of Isleton, at edge of open space in orchard, on line of wire fence which marks boundary between property of Jane Smith and George Nelson, 150 feet east of intersection of levee with said wire fence, 1,000 feet southeast of house of Jane Smith, 0.5 mile west of pumping station on Georgiana Slough; aluminum tablet in top of pier	9.525
Pier No. 11; copper bolt in base	5.806
Pier No. 8, Sacramento County, on Grand Island, on property of Stern & Co., 0.5 mile northeast of Isleton, near end of row of poplar trees running north from levee, 280 feet from junction of said row and levee, 1,000 feet northwest of house, near dividing line between property of Mrs. Buckley and that of Stern & Co.; aluminum tablet in top of pier	6.407
Pier No. 8; copper bolt in base	2.813
Rio Vista, 1.9 miles north of, 100 feet east of saloon, near ferry landing, 60 feet west of river, east side of road, in top of 6 by 6 inch timber; nail	9.829
Rio Vista ferry; gage zero (below sea level)	—3.843
Rio Vista, water gage; spike in 16.4 foot mark	12.921
Rio Vista; gage zero (below sea level)	—3.479
Rio Vista, southeast corner of bank building, 2 feet above sidewalk; aluminum tablet stamped "23 B 1905 F 17"	22.985
Pier No. 6, Solano County, 0.3 mile south of Rio Vista, 0.3 mile west of southern end of Wood Island, just above edge of swamp in river bottom; tablet in top of pier	29.409
Pier No. 6; copper bolt in base	25.718
Rio Vista, 3.5 miles southwest of, 100 feet from southwest corner of Madison's blacksmith shop, north corner of field, east side of road; iron post stamped "B 54 1907 F 20"	54.382

From point near Walnut Grove southwest along southeast side of Sacramento River

	Feet
Pier No. 11, Sacramento County, in town of Walnut Grove, on property of Mary L. Wise, 0.5 mile north of post office, near fence on southwest side of corral surrounding barn, in line with short row of fruit trees running northeast from levee, 250 feet northeast of house near levee, 400 feet east of large oak tree on river bank marking corner in north boundary of property of Mary L. Wise; aluminum tablet in top of pier	8.774
Pier No. 11; copper bolt in base	5.152
Walnut Grove; gage zero (below sea level)	—0.834
Georgiana Slough; gage zero (below sea level)	—5.169
Isleton; gage zero (below sea level)	—4.087
Ida Island, south of east end of G. F. Terschman's house, 85 feet west of, 200 feet south of Sacramento River; iron post stamped "5 B 1906 N"	5.503
Pier No. 7, Sacramento County, on Brannan Island, on property of J. Desrosier, 2 miles west of Isleton, and 0.25 mile above Rio Vista ferry, in northeast corner of orchard, 275 feet south of levee, 225 feet south of house, 110 feet southeast of barn; aluminum tablet in top of pier	6.805
Pier No. 7; copper bolt in base	3.121

Precise leveling by L. F. Biggs in 1908

Near Toland Landing (see Antioch quadrangle)

Toland Landing, summit of Blue Gum Hill, in top of pier 4; aluminum tablet	120.080
Toland Landing, summit of Blue Gum Hill, in base of pier 4; copper bolt	116.390

Primary leveling by C. L. Nelson in 1906 and B. A. Jenkins in 1908

From Toland Landing south across Sherman Island to north bank of San Joaquin River, thence west to Antioch

Toland Landing, 3.9 miles south of, at south end of road crossing Sherman Island southward from Tolands Landing, at turn 0.5 mile south of pump house, 100 feet north of San Joaquin River, south of road, 0.25 mile east of house; iron post stamped "—1 1906 B. N." (below sea level)	—0.942

From Rio Vista north by Steamboat Slough and Sutter Slough to fork of Sutter and Steamboat sloughs

Rio Vista, 3.7 miles north of, 0.8 mile south of Westgate's place, 250 feet west of river, 200 feet west of house on north side of road; iron post stamped "—1 B. N. 1906" (below sea level)	—0.570
Walkers Landing, 0.7 mile north of, west side of road, 150 feet west of Steamboat Slough, 250 feet northwest of J. Hollenbeck's house; iron post stamped "4 1906 B. N."	4.160

From Walnut Grove south along east side of Tyler Island and west to Rio Vista

	Feet
Tyler Island, east side of road across island, 200 feet west of Mokelumne River, on ranch "J" of Bauman property, 0.25 mile south of pump house; iron post stamped "—1 N 1906" (below sea level)	—0.528
Camp C, 140 feet east of house, 100 feet north of Mokelumne River, 100 feet northwest of barn; iron post stamped "0 1906 B. N."	0.278
Tyler Island ferry landing, 150 feet west of, north side of road, 50 feet west of saloon; iron post stamped "3 1906 B. N."	3.600

From point 5.1 miles southwest of Bracks Landing via Brack's pump house and Staten Island to Brannan's ranch "J"

Tyler Island, east of road, 200 feet west of Mokelumne River, on ranch "J" of Brannan's property, 0.25 mile south of pump house; iron post stamped "—1 1906" (below sea level)	—0.528

Primary leveling by R. A. Farmer in 1905

From Hagansville southwest along North Fork of Mokelumne River to Golden State cannery, thence south and west to Andrus Island pump house, thence north to Isleton

Hagansville, 250 feet east of Staten Island pump house, on bridge across canal; bolthead painted "U. S. —4 B. M. 36" (below sea level)	—3.14
Staten Island pump house, 1.8 miles south of, 20 feet south of house camp 8, at corner of garden; iron post stamped "—1 B 1908 20" (below sea level)	—0.714
Golden State cannery, 100 feet south of, in cottonwood tree; aluminum tag stamped "4–47" (U. S. Corps of Engineers bench mark 26)	4.47
Golden State cannery, 1 mile south of, at southeast corner of China House, 100 feet west of Mokelumne River; iron post stamped "—2 B 1908 21" (below sea level)	—1.280
Golden State cannery, 1.7 miles southwest of, at angle in canal, 1 mile west of pumping plant, in post painted "U. S. —8 B. M.," aluminum tag stamped "—8 48" (below sea level)	—8.02
Andrus Island, at Jackson Dam, where Isleton road leaves levee and where Jackson Slough joined main slough before it was drained, 50 feet west of house, 10 feet west of road; iron post stamped "—1 B 1908 22" (below sea level)	—0.669
Isleton, 1.8 miles south of, where road to Golden State cannery leaves Jackson Slough, 50 feet north of barn, at road angle; iron post stamped "B–1908 —1 23" (below sea level)	—0.402

BUFFALO CREEK AND FOLSOM QUADRANGLES

[Latitude 38° 30′–38° 45′; longitude 121°–121° 15′]

ELDORADO AND SACRAMENTO COUNTIES

Primary leveling by L. F. Biggs and B. A. Jenkins in 1908

Point 1.8 miles northwest of Slough House

	Feet
Slough House, 1.8 miles northwest of, where Grant Line road intersects Sacramento-Jackson road; iron post stamped "150 B 1907 30"	151.052

From forks of road 1 mile east by 3.5 miles north of Twelvemile House east to Bridge House, on Folsom road

	Feet
Twelvemile House, 4.5 miles east by 3 miles north of, east of road, at angle; iron post stamped "201 B 1908 6"	201.025
Twelvemile House, 8 miles east by 3 miles north of, on summit, 0.5 mile west of ranch house; iron post stamped "250 B 1908 7"	250.52

From Bridge House north to Folsom

Scott ranch, 2.2 miles south of, on Sacramento-Latrobe road, at gate to private road from south; iron post stamped "184 B 1908 9"	184.800
Scott ranch, 1.6 miles south of, 20 feet west of road, 0.4 mile north of angle in road, in notch in base of 36-inch oak tree; nail with aluminum tag stamped "206 22"	206.42
Scott ranch, 1 mile north of, 60 feet west of road, in large boulder; tablet stamped "198 B 1908 8"	198.393
Scott ranch, 1.7 miles north of, 200 feet north of private road from west, east of road, in notch in root of 48-inch oak tree; nail scribed and painted "U. S. B. M. 211 30"	211.36
Scott ranch, 3.6 miles north of, 100 feet south of big bridge, at east edge of road, in ledge; aluminum tablet stamped "225 1908 B 11"	225.823
Folsom, 5 miles south of, 100 feet east of intersection of roads, in center of road; point on large boulder painted "U. S. G. S. B. M. 341 25"	341.97
Folsom, 3 miles south of, 60 feet south of Alder Creek bridge, at east edge of road; iron post stamped "237 B 1908 12"	237.867
Folsom, northeast corner of Catholic Church lot; iron post stamped "224 B 1908 13"	224.398
Folsom, in front of station; top of rail	193.9

From Folsom west to Fairoaks

Orangevale, 0.5 mile west by 2 miles south of, at intersection of roads; iron post stamped "246 B 1908 15"	246.443
Fairoaks, 2.9 miles northeast of, northwest angle of crossroads, in notch in base of 15-inch oak tree; nail with aluminum tag stamped "249 32"	249.21

From Folsom southwest along road via Natoma to Salisbury

Folsom, 100 feet southwest of bridge over American River, in top of large flat boulder; aluminum tablet stamped "162 B 1908 14"	162.509
Folsom, 0.7 mile west of, north of road, at fence line (U. S. Corps of Engineers[2] bench mark "58 1885")	185.41
Folsom, U. S. Corps of Engineers bench mark No. 57	181.204
Folsom, 3.3 miles west of, north of road, at fence line; iron post stamped "167 7 B. M. 51" (U. S. Corps of Engineers bench mark No. 51)	164.582
Folsom, 3.5 miles west of, stone bridge over Alder Creek, southeast corner of granite guard; aluminum tablet stamped "155 B 1908 B. A. 1"	155.774
Natoma, 0.7 mile west of, south of road, at fence line; iron post stamped "139 7 B. M. 43" (U. S. Corps of Engineers bench mark No. 43)	136.579
Natoma, 1.7 miles west of, south of road, at fence line; iron post stamped "127 3 B. M. 41" (U. S. Corps of Engineers bench mark No. 41)	124.187

[2] Locally known as U. S. Engineer Department.

	Feet
Natoma, 2 miles west of, southeast corner of bridge over Buffalo Creek, top of granite guard; aluminum tablet stamped "129 B 1908 B. B. 1"	129.562

From point near Roseville east and south to Orangevale

Roseville, 0.4 mile south by 1.9 miles east of, south of road, at fence line, on boulder; chisel point painted, "237 B. M. 100"	237.41
Orangevale, 5.5 miles north of, south of road junction, in fence corner; iron post stamped "236 B 1908 B. Y."	236.008
Orangevale, 4 miles north of, at junction of roads, 50 feet south of bridge, at fence corner, in base of 24-inch oak tree; spike with aluminum tag stamped "195 B. M. 102"	195.62
Orangevale, 2.5 miles north of, 500 feet south of white house, east of road, at junction in fence corner; iron post stamped "203 B 1908 B. Z."	203.593

COURTLAND QUADRANGLE

[Latitude 38° 15′–38° 30′; longitude 121° 30′–121° 45′]

SACRAMENTO, SOLANO, AND YOLO COUNTIES

Precise leveling by L. F. Biggs in 1907

From point near Glide Gun Club south along west bank of Sacramento River

	Feet
Glide Gun Club, 0.5 mile south of, on fence line between Glide and Content, 300 feet south of Manuel Content's house, 150 feet west of levee, 20 feet south of southwest corner of woodhouse; iron post stamped "16 B 1905 F 3"	16.572
Pier No. 18, Yolo County, 1.5 miles west of Freeport, on property of Lizzie H. Glide, near oak tree by fence on east side of property, 375 feet south of schoolhouse adjoining levee on right bank of river, and 0.25 mile east from wharf and group of buildings belonging to Lizzie H. Glide; aluminum tablet in top of pier	16.439
Pier No. 18; copper bolt in base	12.821
Freeport, 0.5 mile north of, 40 feet from northeast corner of Anton Fernando's house, west side of road, northeast corner of house lot; iron post stamped "21 B 1905 F 4"	21.412
Clarksburg, 0.5 mile north of, 100 feet east of Merritt School, inside fence; iron post stamped "14 B 1905 F 5"	14.823
Pier No. 16, Yolo County, in town of Clarksburg, on property of Ella P. W. Smith, in south corner of pear orchard inclosed by wire fence, 375 feet southwest of Ella P. W. Smith's house adjoining levee on east side of orchard, 700 feet south of schoolhouse, 1,000 feet northwest of store and post office managed by Cave & Co.; aluminum tablet in top of pier	13.989
Pier No. 16; copper bolt in base	10.345
Clarksburg; gage zero (below sea level)	—3.822

NOTE.—The foot graduations above 20-foot mark are numbered 1 foot too great; thus, 21 is numbered 22.

Clarksburg; 2.2 miles south of, 40 feet south of Ross's house, 200 feet west of Sacramento River; iron post stamped "19–1906 B N"	19.566
Courtland, 2.0 miles north of, 20 feet east of road, 150 feet west of drainage corral, 260 feet north of levee; iron post stamped "10 1906 B N"	10.460

	Feet
Pier No. 14, Yolo County, 1 mile north of Courtland, on property owned by J. L. McFadden, in southwest corner of pasture inclosed by wire fence, 750 feet west of J. L. McFadden's house, 400 feet west of barn, which is 480 feet southwest of house (both buildings adjoin levee); aluminum tablet in top of pier	11.588
Pier No. 14; copper bolt in base	7.914
Grand Island, north corner of bridge abutment; aluminum tablet stamped "B 20 1906 N"	20.256
Pier No. 12, Sacramento County, Grand Island, on property of Isaac G. Hall, 0.5 mile south of Vorden, on fence line on south edge of orchard, 10 feet north of road running west from levee, 160 feet west of large frame house owned by California Transportation Co., in southeast corner of orchard at junction of road and levee, 0.25 mile south of pumping station on west bank of river; aluminum tablet in top of pier	10.897
Pier No. 12; copper bolt in base	7.283
From point near Lisbon School south along east bank of Sacramento River	
Freeport ferry, in front of ferryman's house, north side of road, in top of hitching post; nail	28.392
Pier No. 17, Sacramento County, 1.5 miles south of Freeport, on property of J. H. Beach, at southeast corner of storehouse, 450 feet south of vertex of angle formed by junction of railroad grade with levee, 75 feet north of house and 200 feet west of barn of J. H. Beach, 35 feet north of private road from levee through property of J. H. Beach, 125 feet northeast of junction of private road with levee; aluminum tablet in top of pier	16.861
Pier No. 17; copper bolt in base	12.143
Pier No. 15, Sacramento County, 4 miles northeast of Courtland, on property of the William Johnston estate, in south corner of inclosure south of and adjoining house, 200 feet south of house, 100 feet southwest of windmill, 240 feet northwest of creamery, 185 feet from intersection of fence with levee; aluminum tablet in top of pier	13.353
Pier No. 15; copper bolt in base	9.638
Courtland; gage zero (below sea level)	—3.941
Courtland, south wall of Bauer, Miller & Newbert's store; aluminum tablet stamped "14 B 1906 N"	14.315
Pier No. 13, Sacramento County, in town of Paintersville, on property owned by Maggie V. Painter, 2 miles south of Courtland, 3 feet from south side of high board fence of corral, 30 feet east of two large oak trees standing 20 feet apart, 300 feet southeast of house of Maggie V. Painter, 140 feet east of barn on east side of levee below house, 200 feet from levee; aluminum tablet in top of pier	10.661
Pier No. 13; copper bolt in base	6.962
Vorden; gage zero (below sea level)	—4.692
Grand Island, 4 miles south of bridge, 250 feet southeast of E. B. King's house, 150 feet northeast of Sacramento River levee, 100 feet northeast of cross levee; iron post stamped "8 B 1906 N"	8.411
Grand Island bridge, about 4.1 miles southeast of, 0.9 mile east of E. B. King's house, in base of tree; spike (Sacramento Southern R. R. bench mark)	13.018

Primary leveling by R. A. Farmer in 1905, by C. L. Nelson in 1906, and by B. A. Jenkins in 1908

From Tremont east 4 miles, thence south 6.5 miles, east 2 miles, south 3 miles, and west to Binghamton

	Feet
Bulkey's ranch, southeast corner of yard, west side of road; iron post stamped "34 B"	34.673
Hance Timm's house, 400 feet southeast of, west side of road; iron post stamped "31 B"	31.884
Jud King's ranch house, 0.5 mile west of, southeast corner of sec. 36, T. 7 N., R. 2 E., southeast corner of field; iron post stamped "21 B"	21.258
T. 6 N., R. 2 E., near northeast corner of sec. 24, southeast corner of pasture fence; iron post stamped "8 B"	7.959
T. 6 N., R. 2 E., 1 mile east by 0.25 mile north of Peter's house, southeast corner of field; iron post stamped "17 B"	17.671

From Jud King's ranch house east 2 miles (double spur line)

Jud King's ranch house, 2 miles east of, on north and south fence line, 50 feet east of levee, 150 feet southeast of dead tree on levee; iron post stamped "9 B"	9.327

Bench mark at forks of Sutter and Steamboat sloughs

Forks of Sutter and Steamboat sloughs, 0.7 mile north of, 0.25 mile northwest of H. M. Donaldson's ranch house, 300 feet west of Sutter Slough, in northwest corner of orchard lot; iron post stamped "6 1906 B. N."	6.476

From Courtland southeast to Walnut Grove

Grand Island, at head of Steamboat Slough, 0.5 mile north of bridge, at Kercheval House; zero of gage (below sea level)	—3.838
Grand Island bridge, 3 miles east of, 100 feet southeast of schoolhouse, 0.25 mile northwest of pump house, at southeast corner of yard, west side of road; iron post stamped "—2 B. N. 1906" (below sea level)	—1.938

From Courtland north, east, and southeast to Pierson District creamery, thence east to Franklin road

Courtland, 1.2 miles north of, at east edge of levee, 15 feet south of school, in 24-inch oak tree; nail with aluminum tag stamped "17 41"	16.834
Franklin, 4.3 miles southwest by 5 miles west of, on south edge of second-class road, 600 feet southeast of creamery, in pyramid on root of 30-inch oak tree; nail with aluminum tag stamped "6 39"	6.10

DAVISVILLE QUADRANGLE

[Latitude 38° 30′–38°45′; longitude 121° 30′–121° 45′]

SACRAMENTO AND YOLO COUNTIES

Precise leveling by C. H. Semper in 1901–2

From Davisville east along Southern Pacific R. R. to Broderick

	Feet
Davisville, in front of Davis station; top of rail	48.0
Davisville, 0.4 mile east of, south side of track, 5 feet from milepost 77; iron post stamped "42 B"	42.660

	Feet
Davisville, 3.3 miles east of, south side of track, 18 feet south of milepost 80, on fence line; iron post stamped "28 B"	28.207
Swingle, in front of station; top of rail	28.7
Webster, in front of station; top of rail	22.8
Webster, 1.5 miles east of, south side of track, 5 feet west of milepost 83; iron post stamped "14 B"	14.622
Milepost 86, 4 feet north by 15 feet east of, south side of track; iron post stamped "17 B"	17.900
Broderick, in front of station; top of rail	26.9
Sacramento, in front of station; top of rail	30.2
Sacramento, at foot of L St., south end of steamer shed; 34-foot mark of the United States Weather Bureau gage (determined by R. A. Farmer, 1905, as 12.659 feet above b. m. 21B)	34.083

Primary leveling by G. C. Douglas and R. A. Farmer in 1905

From Sacramento northwest along highway to Woodland

Elkhorn, 7.7 miles south of, water tank on east side of levee road, in front of Lehman's hop yard, 3 feet north of foundation to tank; iron post stamped "32 B"	32.698
Elkhorn, 3.9 miles south of, northwest corner of foundation to Taylor monument; small cross cut in granite block set in brick, marked "U. S. G. S. 29"	29.43
Elkhorn, 2.9 miles south of, 300 yards west of John Merkley's house, at corner of grove; stone monument marked "U. S. B. M. 72"	20.29
Elkhorn, 2.8 miles south of, west corner of cement-foundation water tank on levee, opposite John Merkley's place; aluminum tablet stamped "32 B"	32.575
Elkhorn, southwest corner of stone house by watering trough, on road to Woodland; iron post stamped "27 B"	27.345
Elkhorn, 3.6 miles west of, south side of road, 340 feet east of section corner; iron post stamped "23 B"	23.595

At Grays Bend

Knights Landing, 6.1 miles southeast of, 200 feet northwest of Mr. Weisman's house at Grays Bend, west side of road, at foot of levee; iron post stamped "29 B"	29.743

From Elkhorn Weir to Elkhorn

Elkhorn, 3 miles north of, 400 feet north of Dillon's house, 50 feet west of levee, on fence line; stone monument (U. S. B. M. 69)	26.069
Elkhorn, 2.9 miles north of, 200 feet south of Dillon's house, at north end of Elkhorn Weir, top of west end of wall; aluminum tablet stamped "30 B"	30.620
Elkhorn, 2.9 miles north of, 60 feet south of Dillon's house, stone monument (U. S. B. M. 70)	30.52

Precise leveling by L. F. Biggs in 1907

From Sacramento south along west bank of Sacramento River

Sacramento, United States Weather Bureau gage at corner of Southern Pacific R. R. freight shed, foot of L St.; nail in notch of 30-foot mark	30.079
L Street gage zero	0.079
United States gage zero	0.053
Southern Pacific gage zero (below sea level)	—4.301

	Feet
Pier No. 22, Yolo County, 1 mile northwest of Broderick, on property of Valentine Hauser, 250 feet west of levee, 500 feet west of Sacramento River, on line of wire fence running east and west between two pastures; aluminum tablet in top of pier	22.790
Pier No. 22; copper bolt in base	19.098
Broderick, 3.0 miles south of, west side of road, in front of hop-storing house on Faris place; iron post stamped "B 29 1905 F 1"	29.231
Pier No. 20, Yolo County, 5 miles southwest of Broderick, 500 feet west of Sacramento River levee, on property of Pauline U. Gruhler, in corner of fence; aluminum tablet in top of pier	19.285
Pier No. 20; copper bolt in base	15.640
Riverside, opposite, 300 feet south of Machardos's house, 20 feet south of road; iron post stamped "22 B 1905 F 2"	22.875

From Sacramento south along east bank of Sacramento River

Pier No. 21, Sacramento County, in outskirts of Sacramento, on property of W. W. Burler, in northwest corner of hopyard west of and adjoining Riverside Road, 30 feet from levee on east side of Sacramento River, 600 feet west from saloon of E. H. Hoppe, 0.25 mile northwest of end of electric car line, 0.5 mile south of Odd Fellows' Cemetery; aluminum tablet in top of pier	21.737
Pier No. 21; copper bolt in base	18.091
Sacramento, Southern Pacific R. R. bench mark, in base of tree at railroad crossing; spike	18.627
Pier No. 19, Sacramento County, 4 miles north of Freeport and 1.25 miles below brickyard on left bank of Sacramento River, on property of Joe Tash, 225 feet east of levee, on south side of private road leading from county road to house of Joe Tash, 125 feet northeast of barn, 300 feet southwest of windmill, and 720 feet southwest of junction of county and private road; aluminum tablet in top of pier	18.366
Pier No. 19; copper bolt in base	14.688

DUNNIGAN QUADRANGLE

[Latitude 38° 45′–39°; longitude 121° 45′–122°]

COLUSA, SUTTER, AND YOLO COUNTIES

Primary leveling by C. H. Semper in 1904 and by W. H. Monahan in 1908

From Hershey southeast along Southern Pacific R. R. to Yolo

	Feet
Hershey, 50 feet west of track, at road crossing, 50 feet north of Colusa-Yolo county line; iron post stamped "137 B"	137.726
Dunnigan, 60 feet north of station, at edge of park fence; iron post stamped "67 B"	67.618
Dunnigan, 3.2 miles south of, 50 feet east of milepost 101, 60 feet east of track, at road crossing; iron post stamped "45 B"	45.555
Zamora, 0.6 mile north of, 0.2 mile south of milepost 98, east of track, on right of way at public-road crossing, sec. 17, T. 11 N., R. 1 E., at corner of fence; iron post stamped "46 B"	46.441
Ronda station, at road crossing near milepost 94.7, east of track at corner of right of way fence; iron post stamped "54 B"	54.793

From College City southeast and south to point near Dunnigan

	Feet
John's School, 1.1 miles north of, fence at southeast angle of crossroads; iron post stamped "43 B"	43.617
Spanish ranch house, 1.6 miles north of, south side of county line, at entrance to ranch; iron post stamped "47 B"	47.624
Vombreyman's ranch, at fence line, northeast angle of road to north; iron post stamped "36 B"	36.302

From Sam Hines ranch via Howell Point to Rough and Ready Landing

Wilkins Slough School, at west end of fence, road in front of school; iron post stamped "32 B"	32.740
Wilkins Slough School, 2.3 miles south of, at road to J. M. Miller's ranch house; iron post stamped "34 B"	34.763
Howells Point, entrance to landing, Yolo-Colusa county line; iron post stamped "37 B"	37.983
Howells Point, 1.8 miles south of, gate leading to Ern Miller's ranch house; iron post stamped "31 B"	31.671
Rough and Ready Landing, at junction of canal and river, south side of canal, 40 feet west of large oil tank; iron post stamped "40 B"	41.233

From Knights Landing west 4.9 miles, thence north to Rough and Ready Landing

Zamora post office, 4.3 miles east of, at crossroads to Yolo and Grimes Landing, northeast angle of roads; iron post stamped "41 B"	41.777

From Zamora east 4.3 miles

Zamora, 2.5 miles east of, at corner of gate to barnyard of F. Schliemann's ranch house; iron post stamped "49 B"	49.693

From Dunnigan southwest and south along county road to point near Brimley ranch

Brimley ranch, 1 mile north of, summit between Dunnigan and Fairview School, east side of road; iron post stamped "333 B"	333.803

From point 6.3 miles west by 1 mile north of Marcuse via Kirkville to point near Sutter School

Kirkville, 2.5 miles south of, 3 miles north of Sutter School, at angle in road at east side, 500 feet south of deserted building; in angle of road where road turns east from river 0.5 mile and north again, 2 miles south of Perry Hyatt's place; iron post stamped "Prim. Trav. Sta. No. 160 Cal 1908 33"	33.460
Sutter School, in county road, 2 feet from fence near northeast corner of schoolhouse yard; iron post stamped "Prim. Trav. Sta. No. 161 Cal 1908 36"	36.344

From Kirkville north by road to point 3.6 miles north of Salem School

Kirkville, 2 miles north of, east of road which passes through small grove of oak trees, 0.5 mile south of Mr. Correll's place, at base of small oak tree; iron post stamped "Prim. Trav. Sta. No. 200 1908 28"	28.859
Salem school, 1.4 miles north of, on east side of road, under large black-oak tree, 2,000 feet north of H. Poffenberger's place; iron post stamped "Prim. Trav. Sta. No. 210 Cal 1908 42"	43.011

FAIROAKS QUADRANGLE, COMPRISING ANTELOPE, ARCADE, BRIGHTON, AND MILLS 7½′ QUADRANGLES

[Latitude 38° 30′–38° 45′; longitude 121° 15′–121° 30′]

PLACER AND SACRAMENTO COUNTIES

Primary leveling by L. D. Ryus in 1901

From Sacramento northeast to San Juan School

	Feet
Sacramento, in north wall of post office, 15 feet east of northwest corner, 5 feet above ground; aluminum tablet "31 B"	31.086

Precise leveling by C. H. Semper in 1901–2

From Sacramento southeast along Southern Pacific R. R. to Brighton

Sacramento, 300 feet east of Capitol, in top surface of meridian stone; aluminum tablet stamped "21 B" (elevation by Coast and Geodetic Survey is 2.876 feet higher)	21.424
Sacramento, at Thirteenth St. crossing; top of rail	21.8
Sacramento, at Twenty-fifth St. crossing; top of rail	24.5
Brighton, in front of station; top of rail	42.9
Brighton, 200 feet south of station, 20 feet west of track, at telegraph pole; iron post stamped "41 B"	41.598
Brighton, 3.2 miles south of, 6 feet south of milepost 131, east side of track; iron post stamped "36 B"	36.296

Primary leveling by L. D. Ryus in 1901 and by L. F. Biggs and B. A. Jenkins in 1908

From Sacramento northeast to San Juan School, thence to Fairoaks, south to Soudan, southwest along Southern Pacific R. R. to Routier, south to Walsh station, and northwest along Southern Pacific R. R. to Brighton

Sacramento, 3 miles northeast of State Capitol, at intersection of roads; iron post stamped "39 B"	39.723
Ben Ali, 2.5 miles east of, 150 feet west of windmill, at intersection of roads; iron post stamped "69 B"	69.076
San Juan School, 1 mile east of, southeast corner of field, at intersection of roads; iron post stamped "191 B"	191.125
Fairoaks Junction, 300 feet east of switch, at southeast corner of field, north of track; iron post stamped "113 B"	113.473
Routier, opposite station, north of county road; iron post stamped "69 B"	69.326
Walsh, at southwest corner of field, opposite saloon; iron post stamped "64 B"	64.603

From Sacramento north along Marysville road to forks of road at northwest corner of sec. 19, T. 10 N., R. 5 E., thence east to quarter corner on south side of sec. 10, T. 10 N., R. 6 E., thence south to Fairoaks

Sacramento, 5 miles north of Capitol, 250 feet north of house, 100 feet west of corner at L of road; iron post stamped "28 B"	28.333
T. 10 N., R. 5 E., northwest corner of sec. 19, at intersection of road running east from main road; iron post stamped "31 B"	31.262
T. 10 N., R. 5 E., southwest corner of sec. 13, 1 mile south of Center Union School, east side of road, at angle to north; iron post stamped "89 B"	89.351

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	Feet
Antelope, 2 miles northeast of, at edge of Southern Pacific R. R. right of way, north of road at crossing, west of track; iron post stamped "146 B"	146.450
T. 10 N., R. 6 E., near center of sec. 26, southeast corner of Sylvan School yard, at crossroads; iron post stamped "151 B"	151.612
From forks of road 2.6 miles east of Riego south to center line of T. 10 N., thence east 2.25 miles to Fork road near Dry Creek, thence south and southwest to Sacramento	
Roseville, 8.6 miles west by 2.6 miles south of, in southwest angle of crossroads, 0.25 mile east of southeast corner of sec. 16, T. 10 N., R. 5 E., 1,000 feet south of white house, in fence corner; iron post stamped "61 R"	61.662
Dry Creek, 0.4 mile west of, west of road, between secs. 14 and 23, T. 10 N., R. 5 E., at grove of oaks, in base of 36-inch oak tree, 60 feet west of second-class road; spike, with aluminum tag stamped "78–84"	75.31
Sacramento, 9 miles northeast of, east of road through Haggan grant; iron post stamped "66 B 1908 S. B."	67.407
Sacramento, 8.2 miles northeast of, south bank of small creek, east of road through grant, in base of 10-inch cottonwood tree; spike, aluminum tag stamped "53 87"	53.78
Sacramento, 5.6 miles northeast of, east of road, at road junction, 50 feet east of gate to ranch house, at fence corner; iron post stamped "50 B. T., 1908 B"	51.073
Sacramento, 3.2 miles north of, east of road, at road junction, 20 feet south of fence corner; iron post stamped "39 B"	39.723
Sacramento, 2.4 miles north of, east of road, at fence line, 0.25 mile north of bridge; iron post stamped "U. S. E. D. B. M. 10 33.5"	30.443
Sacramento, 1.6 miles north of, north of road, 400 feet north of Sacramento Northern R. R. crossing: iron post (United States Army, Corps of Engineers,[3] B. M. 8, elev. 28.5)	25.553
From point near Sylvan School southwest 3.5 miles, thence northwest 4 miles to fork 2.8 miles northwest of Wanega station	
Sylvan School, sec. 26, T. 10 N., R. 6 E., 2.4 miles southwest of, south of road, opposite Twelvemile House, 25 feet south of southeast corner of porch of hotel; iron post stamped "108 B 1908 B. V."	109.300
Walerga, 700 feet northeast of station, north of right of way, 35 feet west of milepost 101, at fence line; iron post stamped "107 B 1908 U B"	107.506
From Roseville south and east 3 miles (part of line to Orangevale)	
Roseville, 0.4 mile south of, bridge over creek, in top of floor; spike, painted "150 98"	150.48
From Riego south 2.7 miles to Fork road, thence east 2 miles	
Riego, 1.3 miles south of, north of road, in top of granite post on county line; aluminum tablet stamped "37 B 1908 B. D. 1"	37.951
Sixmile House, 3.5 miles north of, at intersection of road running east from main road; iron post stamped "31 B"	31.262

[3] Locally known as U. S. Engineer Department.

From point 5.6 miles northeast of Sacramento east via Arcade to point 3.5 miles east of Ben Ali, thence south to vicinity of Del Paso and west to forks of road 2.4 miles northeast of Sacramento and 0.25 mile northeast of bridge over American River

	Feet
Ben Ali, 2.5 miles east of, 150 feet west of windmill at intersection of roads; iron post stamped "69 B"	69.076
Del Paso, 2.4 miles north of, at road crossing, 60 feet northwest of oak tree, 20 feet south of road; iron post stamped "94 B 1908 B. T. 1"	94.365
Del Paso, 0.25 mile west of, at junction of roads, 25 feet west of gate to headquarters of ranch, at telephone pole; iron post stamped "90 B 1908 U. 1"	91.530
Del Paso, 2.2 miles west of, west of road, at gate and junction of road; iron post stamped "44 B 1908 B. V. 1"	44.450
Del Paso, 5.7 miles west of, west of Southern Pacific R. R., 40 feet east of gate, near telephone pole at fence line; iron post stamped "30 B 1908 B. W. 1"	30.905

From Twelvemile House east 1 mile, thence north 3.5 miles and west and south to Walsh

Twelvemile House, 1 mile east by 3.5 miles north of, at southwest angle of fork of roads; iron post stamped "B 1908 133 1"	133.665
Brighton School, 0.5 mile south of, west of road, north of fork road to west; iron post stamped "68 B 1908 2"	68.392

From Sacramento south 4.3 miles, thence east to Walsh

T. 8 N., R. 5 E., southwest corner of sec. 19, southwest angle of crossroads; iron post stamped "24 B 1908 3"	24.496
T. 8 N., R. 5 E., south side of sec. 21, southwest angle of intersection with upper Stockton road, opposite road house; iron post stamped "30 B 1908 4"	30.380
T. 8 N., R. 5 E., southeast corner of sec. 23, at northwest angle of crossroads; iron post stamped "42 B 1908 5" (probably moved in 1917)	42.969

Bench marks in vicinity of Fairoaks

Fairoaks, 0.7 mile east of, southwest corner of bridge, on concrete; chiseled circle, painted "U. S. B. M."	151.67
Fairoaks, 400 feet north of store, in center of road corner, in notch in base of 50-inch oak tree; nail with aluminum tag stamped "181 35"	181.28
Fairoaks, bridge over American River, in west face of south concrete pier; aluminum tablet stamped "89 B 1908 16"	89.103
Fairoaks, in front of railroad station; top of rail	105.31

KNIGHTS LANDING, MARCUSE, NICOLAUS, AND VERNON QUADRANGLES

[Latitude 38° 45′–39°; longitude 121° 30′–121° 45′]

SUTTER, YOLO, AND YUBA COUNTIES

Precise leveling by C. H. Semper in 1902

North along Southern Pacific R. R.

	Feet
Woodland, 5.6 miles north of, on east side of railroad, at milepost 92 at fence line; iron post stamped "30 B 1902"	30.787
Knights Landing, in front of station; top of rail	37.3

	Feet
Knights Landing, at railroad station, 30 feet east of track, at corner of highway and on line of north side of station; iron post stamped "32 B 1902"	32.411
Knights Landing, 5 miles north of, on west side of railroad, 6 feet from rail, opposite milepost 100; iron post stamped "37 B 1902"	38.032
Knights Landing, 8.1 miles north of, on west side of railroad, 10 feet from track, opposite milepost 103; iron post stamped "38 B 1902"	38.598
Chandler, in front of station; top of rail	37.0
Chandler, 0.1 mile south of station, opposite milepost 106, on east side of railroad, 6 feet from track; iron post stamped "36 B 1902"	36.823
Marcuse, 0.4 mile north of, on west side of railroad at fence line, 5 feet north of milepost 109; iron post stamped "33 B 1902"	33.471
Tudor, 0.2 mile south of, on west side of railroad, at fence line, 5 feet north of milepost 112; iron post stamped "40 B 1902"	40.435

Primary leveling by C. H. Semper in 1904, by G. C. Douglas in 1905, and by L. F. Biggs and W. H. Monahan in 1908

From Rough and Ready Landing southeast along river road to Knights Landing station

Derby Camp, 1.3 miles east of, north edge of river levee, opposite Chinese camp; iron post stamped "39 B"	40.032
Knights Landing, bridge over Sacramento River, top of south abutment, south end of west wing wall; aluminum tablet stamped "41 B"	42.153

From Knights Landing south along river road to Grays Bend

Knights Landing, 4 miles southeast of, west side of road at foot of levee, south line of Mr. Roseberry's place; iron post stamped "30 B"	30.712

From Grays Bend east down river road to Elkhorn weir

Knights Landing, 10.6 miles southeast of, 0.25 mile north of Doyle's house, 40 feet west of junction of river road and lane, north side of road; iron post stamped "29 B"	29.538

From point near Riego northwest to Ryan, thence north to Pleasant Grove station

Sankey, 2 miles southwest of Sacramento Northern R. R. station; Ryan triangulation station, 20 feet northwest of windmill; iron post stamped "34 B 1908 B. E. 1"	35.064
Pleasant Grove, Sacramento Northern R. R. station, east of track, west of road, at fence line, 10 feet south of power pole; iron post stamped "32 B 1908 B. F. 1"	32.475

From Pleasant Grove station north 7 miles, thence west via Nicolaus to Chandler

Alamos, in front of station; top of rail	35.6
Striplin, 100 feet east of station, east of right of way, at fence corner; iron post stamped "33 B 1908 B. M."	33.859
Nicolaus, in front of station; top of rail	42.4
Nicolaus, southwest corner of school yard; iron post stamped "33 B 1908 B. N."	33.364
Nicolaus, 1.4 miles west of, in center of road, in base of 48-inch oak tree; spike with aluminum tag stamped "31 B. M. 146"	31.22
Chandler, in front of station; top of rail	37.2

From forks of road 3.3 miles northwest of Riego west to Verona School, thence north to Nicolaus

	Feet
Verona, 2 miles east of, Barney Mound triangulation station; iron post stamped "35 B 1908 B. R."	35.399
Verona, 1 mile east of, southwest of road, 150 feet south of warehouse, in base of 30-inch oak tree; spike with aluminum tag stamped "33 B. M. 153"	34.05
Verona, 25 feet north of northeast corner of schoolhouse, at fence line; iron post stamped "28 B 1908 B. P."	29.092
McNamara ranch house, 1.2 miles southwest of, 75 feet north of Mahon's dairy ranch, at section line, east of levee; iron post stamped "38 B 1908 B. O."	38.816
McNamara ranch house, 100 feet west of, south of road, at fence; iron post stamped "40.2' (U. S. E. D. bench mark 37)	37.377
Nicolaus, 3.2 miles southwest of, south of river road, in base of 36-inch cottonwood tree; spike with aluminum tag stamped "27 B. M. 149"	27.60

From point 4 miles north of Chandler triangulation station west to point 3.5 miles south of Bear River bridge, thence north to point 10 miles south of Marysville

Wheatland, 4 miles south by 4.8 miles west of, north of road, 300 feet north of intersection of roads; iron post stamped "59.9 B. M. 27"	56.687
Bear River bridge, 1.1 miles south of, 250 feet west of Western Pacific R. R. at bend of road, at fence line; iron post stamped "47.5 B. M. 21"	44.361
Bear River bridge, 150 feet north of, east of road, at fence line; iron post stamped "46 B 1908 B. B. 2"	46.948

From point 4 miles west by 2 miles north of Marcuse to Marcuse

Marcuse, 2.6 miles west by 1 mile north of, at southwest corner of crossroads; iron post stamped "31 1908"	31.808

From point 3.4 miles west by 1 mile north of Marcuse west toward Kirkville

Marcuse, 5.8 miles west by 1 mile north of, west of road, 300 feet west of levee, driven in ground; iron peg marked "25"	25.54
T. 13 N., R. 2 E., sec. 11, 120 feet more or less south of center of, 158 feet south of junction of a levee and an old branch levee extending east, at base of large oak tree, on easterly edge of crown of a levee; iron post (not stamped)	37.55

At point 4.5 miles northeast of Kirkville

Kirkville, 4.5 miles northeast of, south of road in tule swamp, standing out prominently; iron post stamped "22 Cal 1908"	22.715

From point near Sutter School to Knights Landing

Knights Landing, 2.6 miles north of, on east side of river road, under black-walnut tree, 1,200 feet north of white house with yellow-green roof; iron post stamped "Prim. Trav. Sta. No. 142 Cal 1908 35"	35.348

From point on Southern Pacific R. R. 3 miles south of Chandler west to old railroad grade, thence northeast to forks of road 2.6 miles west of Marcuse

	Feet
Marcuse, 2.6 miles west by 6.2 miles southwest of, at north end of abandoned trestle of Southern Pacific R. R. and at south end near center of old grade, near end of line of willow trees; iron post stamped "22 Cal 1908"	22.068
Marcuse, 2.6 miles west by 5 miles southwest of, on west side of old grade railroad bed, in base of tree; spike with aluminum tag stamped "22"	22.73
Marcuse, 2.6 miles west by 1.9 miles southwest of, west of old railroad bed; iron peg driven flush with ground, marked "26"	26.77
Marcuse, 2.6 miles west by 1 mile southwest of, west of old railroad bed; iron peg driven flush with ground, marked "27"	27.51

From point 3.4 miles west by 1 mile north of Marcuse southwest 2.25 miles (double spur line)

Yuba City, 16.6 miles southwest of, on levee about 3 miles west of Marcuse, near old cabin, iron post stamped "Prim. Trav. Sta. No. 305 38 Cal 1908"	38.902

LINCOLN, PLEASANT GROVE, ROSEVILLE, AND SHERIDAN QUADRANGLES

[Latitude 38° 45′–39°; longitude 121° 15′–121° 30′]

PLACER AND SUTTER COUNTIES

Precise leveling by the U. S. Coast and Geodetic Survey in 1920 over primary line by L. F. Biggs in 1908

From Wheatland southeast along Southern Pacific R. R. to Roseville

	Feet
Sheridan, about 2 miles northwest of, on Southern Pacific R. R., at south end of concrete highway bridge over Bear River, east of highway, in horizontal surface of curbing wall; an iron bolt (U. S. C. & G. S. b. m. U–18)	107.342
Sheridan, 300 feet south of station, northeast corner of brick warehouse; iron post stamped "114 B 1908 B. E." (U. S. C. & G. S. b. m. V–18)	114.580
Sheridan, about 1.75 miles south of, on Southern Pacific R. R., 7 feet north of milepost 123, 15 feet east of track; concrete post with disk in top (U. S. C. & G. S. b. m. W–18)	102.926
Sheridan, 2.7 miles south of, east of track, 10 feet east of milepost 123; iron post stamped "110 P. B. M. F." (C. & G. S. b. m. X–18)	110.561
Lincoln, 2 miles north of, east of track, 15 feet east of milepost 120, at fence line; iron post stamped "141 P. B. M. G." (C. & G. S. b. m. Y–18)	142.037
Lincoln, 30 feet east of track, north end of station; iron post stamped "163 H" (U. S. C. & G. S. b. m. Z–18)	163.655
Lincoln, Burdge Hotel, northeast corner of concrete sidewalk; aluminum tablet stamped "167 I" (C. & G. S. b. m. A–19)	168.166
NOTE.—The top of the original aluminum tablet was found to have been knocked off the center stem.	
Lincoln, about 0.75 mile south of, on Southern Pacific R. R., on north concrete abutment of trestle 116–C, over Auburn Ravine, 4 feet east of main-line track; brass disk (U. S. C. & G. S. b. m. B–19)	151.781

	Feet
Lincoln, about 2.25 miles south of, on Southern Pacific R. R., 6 meters (20 feet) south of private-road crossing, 35 feet east of track at a telegraph pole; concrete post with disk in top (U. S. C. & G. S. b. m. C–19)	140.784
Lincoln, 3.9 miles south of, east of track, in fence line, 20 feet northeast of milepost 114; iron post stamped "124 K" (C. & G. S. b. m. D–19)	124.599
Whitney, about 0.75 mile south of, on Southern Pacific R. R., opposite culvert 111–A, 325 feet south of private-road crossing, 65 feet east of track, on west head wall of concrete highway culvert; iron bolt (U. S. C. & G. S. b. m. E–19)	126.819
Roseville, 3.5 miles north of, east of track, in fence line, 20 feet northeast of milepost 111; iron post stamped "131 L" (C. & G. S. b. m. F–19)	131.955
Roseville, about 1.5 miles north of, on Southern Pacific R. R., at mileage 108.2, 2 feet west of and 4 inches below west track, on south concrete abutment of a steel girder span over highway; brass disk (U. S. C. & G. S. b. m. G–19)	138.379

Primary leveling by L. F. Biggs and W. H. Monahan in 1908

From Roseville west along road to point near Riego

Roseville, in northeast corner of school yard; iron post stamped "159 B. B. M."	160.295
Roseville, southeast corner of brick church, 4 feet above ground; aluminum tablet stamped "159 N"	160.021
Roseville, 2.6 miles west of, north of road, at Rosecrest, 50 feet west of live-oak tree (forked) 24 inches in diameter; iron post stamped "153 O"	154.219
Roseville, 5.9 miles west of, north of road, on summit, between two drains; at fence line; iron post stamped "103 P"	103.672
Roseville, 8.6 miles west of, west of road, 20 feet east of road junction, 3 feet south of fence; iron post stamped "63 Q"	64.009
Riego, in front of station; top of east rail	44.2
Riego, 500 feet southeast of Johnson ranch house, at bend of road, south of road, 10 feet west of telephone pole; iron post stamped "40 B 1908 B. C. 1"	40.354
Johnson ranch house, 1 mile northwest of, east of second-class road, in base of locust tree; spike with aluminum tag stamped "32 112"	32.744

From Roseville northeast along Southern Pacific R. R. toward Rocklin

Roseville, 2.1 miles east of, north of track, in base of milepost 110; spike with aluminum tag stamped "201 96"	201.85

From Pleasant Grove along road east 4 miles, thence south to crossroads 2.6 miles east of Riego

Pleasant Grove, at road junction, 75 feet northwest of hotel, 15 feet east of windmill, at fence corner; iron post stamped "47 B 1908 B. G. 1"	47.916
Pleasant Grove, 2.7 miles east of, in northeast angle of second-class road junction, 5 feet east of fence corner; iron post stamped "75 B 1908 B. H. 1"	75.192
Falconer ranch, 1.9 miles south of, west of road, at section line; iron post stamped "64 B 1908 B. I."	64.017

From forks of road 7 miles west of Roseville north and east, thence north and west to forks of road 2.7 miles east of Pleasant Grove

	Feet
Roseville, 5 miles west of, Kaseborg triangulation station, at west end of cabin; iron post stamped "106 B 1908 B. J. 1"	106.553
Pleasant Grove, 250 feet west of schoolhouse, west side of road, at fence corner; iron post stamped "106 B 1908 B. K. 1"	106.062

From Pleasant Grove north along road 9.25 miles, east 3.7 miles, and north to Wheatland

Pleasant Grove, 3.5 miles north of, at intersection of roads, 150 feet south of house, west of road, in southeast corner of lot; iron post stamped "50 B 1908 B. X. 1"	50.978
Pleasant Grove, 7.1 miles northeast of, at intersection of roads where line turns west, south of road, 25 feet north of gate; iron post stamped "53 B 1908 B. Y. 1"	55.377
Wheatland, 4 miles south by 3.7 miles west of, at intersection of roads where power line turns south, south of road, 25 feet east of power pole 34–20; iron post stamped "61 B 1908 B. Z. 1"	62.305
Wheatland, 4 miles south of, at intersection of roads, 25 feet west of gate where power line turns west, south of road, 50 feet south of power pole 31–6; iron post stamped "82 B 1908 B. A. 2"	82.500
Wheatland, 0.5 mile south of, east of road, at fence line; iron post stamped "83.3 B. M. 48" (U. S. Army Corps of Engineers[4] B. M. 48)	80.100

From forks of roads 5.9 miles north of Pleasant Grove east to Lincoln

Lincoln, 4.4 miles west of, south of road at road crossing, at fence corner; iron post stamped "104 B 1908 B. L. 1"	104.742

From Pleasant Grove northeast and north to crossroads 4.4 miles west of Lincoln

Pleasant Grove, 6.6 miles northeast of, at northeast corner of intersection of roads; iron post stamped "104 B 1908 B. S. 1"	104.329

From Lincoln north along road 6.6 miles, thence west to Sheridan

Lincoln, 3.4 miles north of, at northwest corner of road intersection; iron post stamped "174 Cal 1908"	174.400
Lincoln, 5.1 miles north of, at northeast corner of T road east, on top of stone; chiseled square, marked "173"	191.45
Lincoln, 6.6 miles north of, 4.5 miles east of Sheridan, at northwest corner of road intersection; iron post stamped "258 Cal 1908"	259.093
Sheridan, 2 miles east of, at southeast corner of bridge over small stream, 175 feet west of T road north, in post; spike with aluminum tag stamped "117"	118.15

From point near Wheatland west 2 miles to Sheridan

Wheatland, 3.1 miles east of, north of road, 800 feet east of intersection of roads, in fence line; iron post stamped "78.2 B. M. 49" (U. S. Army Corps of Engineers bench mark)	75.036

At point 3.1 miles east of Roseville

Roseville, 3.1 miles east of, 200 feet south of milepost 111, south of right of way, 10 feet north of fence corner, iron post stamped "219 B 1908 B. W."	219.025

[4] Locally known as U. S. Engineer Department.

QUADRANGLE INCLUDING BRUCEVILLE, CARBONDALE, CASTLE, CLAY, CLEMENTS, COSUMNES, ELK GROVE, FLORIN, GALT, GOOSE CREEK, HEADREACH, LINDEN, LOCKEFORD, NEW HOPE, WATERLOO, AND WOODBRIDGE 7½ QUADRANGLES

[Latitude 38°–38° 30′; longitude 121°–121° 30′]

SACRAMENTO AND SAN JOAQUIN COUNTIES

Precise leveling by the U. S. Coast and Geodetic Survey over route of precise-level line by the U. S. Geological Survey

From Florin south along Southern Pacific R. R. to Hammer

	Feet
Florin, about 0.8 mile north of, at milepole 130, on right of way of Southern Pacific R. R., east of track, 0.5 meter west of east fence line; Geological Survey iron post stamped "36 B" (U. S. C. & G. S. b. m. U–9)	36.296
Florin, about 3 miles south of, at Southern Pacific R. R. milepole 126, north of highway crossing, east of track, 10 meters south of angle of fence; Geological Survey iron post stamped "37 B" (U. S. C. & G. S. b. m. T–9)	37.287
Elk Grove, at southwest corner formed by Southern Pacific right of way with main street of Elk Grove, west of track, opposite north end of Southern Pacific R. R. station, between two poles set about 2.5 meters apart; Geological Survey iron post stamped "49–B" (U. S. C. & G. S. b. m. S–9)	49.849
McConnell, 0.2 meter northeast of northeast corner of small house between Southern Pacific R. R. track and county road; Geological Survey iron post stamped "46–B" (U. S. C. & G. S. b. m. R–9)	46.959
Need, 375 meters south of station sign, 30 meters south of milepole 115, on top of north concrete abutment to the Southern Pacific R. R. bridge, about 0.3 meter below track; red metal disk (U. S. C. & G. S. b. m. Q–9)	43.658
Galt, on right of way of Southern Pacific R. R., in line with north end of railroad station, 13.1 meters west of main line, 0.6 meter from northwest corner of grass park; Geological Survey iron post stamped "46.B" (U. S. C. & G. S. b. m. P–9)	46.132
Jahant, 8 meters south of milepole 108, on Southern Pacific R. R. right of way, at crossing 107F, 0.9 meter north of north highway fence, 11.3 meters east of track; Geological Survey iron post stamped "48B" (U. S. C. & G. S. b. m. O–9)	48.845
Acampo, on top surface of north concrete abutment of Southern Pacific R. R. bridge 107D, about 0.6 meter below top of rail; red metal disk (U. S. C. & G. S. b. m. N–9)	50.748
Acampo, at crossing 105A, in north edge of road, 16 meters east of Southern Pacific R. R. track, 6.4 meters south of north crossing fence; Geological Survey iron post stamped "53 B" (U. S. C. & G. S. b. m. M–9)	53.212
Lodi, 200 meters north of the Southern Pacific R. R. station, in east face of northeast pillar under water tank; red metal disk (U. S. C. & G. S. b. m. L–9)	51.962
Lodi, 75 meters south along Southern Pacific R. R. track from milepole 102, north of road at crossing, in edge of cultivated field, 16.3 meters east of track and about 1.2 meters below it, 0.9 meter east of fence corner; Geological Survey iron post stamped "45 B" (U. S. C. & G. S. b. m. K–9)	45.840

	Feet
Pearson, 7.7 meters north along track of Southern Pacific R. R. from milepole 99 on right of way, 0.3 meter west of east line fence, 4.8 meters east of track and about 1 meter below it; Geological Survey iron post stamped "37 B" (U. S. C. & G. S. b. m. J–9)	37.999
Hammer, 1.2 miles north of, at railroad mileage 96.8, in west head wall of concrete culvert 96B, under Southern Pacific R. R. track; red metal disk (U. S. C. & G. S. b. m. I–9)	33.412
Hammer, 0.5 mile north of, on right of way of Southern Pacific R. R. 11.8 meters north along track from milepole 96, 0.8 meter west of east line fence, 15 meters east of track and about 1 meter below it; Geological Survey iron post stamped "28 B" (U. S. C. & G. S. b. m. H–9)	28.668

Precise leveling by C. H. Semper in 1901–2

From Florin south along Southern Pacific R. R. to milepost 97

Florin, 150 feet north of station, at crossing; top of rail	39.8
Elk Grove, in front of station; top of rail	49.9
Arno, 50 feet south of station, west side of track, at fence line; iron post stamped "35 B"	35.609
Arno, in front of station; top of rail	37.4
Milepost 114, 10 feet south of, east side of track; iron post stamped "42 B"	42.435
Galt, in front of station; top of rail	46.7
Forest Lake, in front of station; top of rail	48.7
Acampo, in front of station; top of rail	56.1
Lodi, in front of station; top of rail	51.2

Primary leveling by L. F. Biggs and B. A. Jenkins in 1907

From Florin east 3.5 miles

Florin, 3.5 miles east of, at intersection of roads; iron post stamped "B 32 1907 63"	64.037

From Elk Grove east and northeast along Grant Line road

Sheldon, at road corner, 50 feet south of Sheldon saloon; iron post stamped "B 1907 73 31"	74.083

From Galt northeast along road 5.4 miles to point 1.7 miles west of Conley

Conley, 1.7 miles west of, at intersection of roads; iron post stamped "B 1907 62 22"	62.441

From point south of Arno west via Bruceville School to crossing of Stockton road and Western Pacific R. R., thence north via Franklin to point 2 miles north of Union School and east to Florin

Bruceville, 20 feet west of schoolhouse, at edge of steps over fence; iron post stamped "B 1907 21 No. 34"	21.727
Franklin, corner of Masonic Hall; aluminum tablet stamped "B 1907 18 35"	19.030
Franklin, 6.7 miles north of, 20 feet north of schoolhouse, in angle of fence; iron post stamped "B 1907 15 36"	15.900

From Stockton road crossing on Western Pacific R. R. west 3 miles to point 4.3 miles south by 3 miles west of Franklin

Franklin, 4.3 miles south by 3 miles west of, at southeast corner of bridge across slough; iron post stamped "B 1907 5 37"	5.374

From point 2 miles east of Michigan Bar west along road via Liveoak and Slough House to Grant Line, thence along Grant Line road to point 4 miles northeast of Sheldon

	Feet
Michigan Bar, northwest corner of schoolhouse; iron post stamped "BB 1907 6 333"	333.928
Bridge House, 1.4 miles north of, west side of road, 75 feet east of house on summit of rise, at fence corner; iron post stamped "BB 1907 7 154"	154.943

From road intersection 1.7 miles west of Conley north to Slough House

Slough House, 13.2 miles southwest of, where first road from W. & R.'s colony intersects road; iron post stamped "B 1907 73 27"	73.729
Slough House, 6.1 miles southwest of, in front of ranch house, west side of road; iron post stamped "B 1907 123 28"	124.001
Slough House, 0.8 mile southeast of, in top of south pier of McCracken's bridge; bronze tablet stamped "B 1907 113 29"	114.037

From point near Conley northeast along road to Carbondale

Conley, 200 feet northeast of station, at railroad crossing; top of rail	75.3
Clay, northwest corner of schoolhouse; iron post stamped "BB 1907 105 23"	105.851
Clay, 5.6 miles northeast of, T. 6 N., R. 8 E., southeast part of sec. 15, 4 feet north of gate to grant; iron post stamped "B 1907 205 24"	205.089
Clay, 11 miles northeast of, 200 feet south of Alabama House, at junction of road to Clay, at fence corner; iron post stamped "BB 1907 237"	237.255
Carbondale, in front of station; top of rail	214.5

From Liveoak south via Wilbur to Alabama House

Alabama House, 3.5 miles northwest of, 250 feet west of junction of road, 2 feet west of gatepost; iron post stamped "BB 1907 2 180"	180.669

From point near Wilbur west along road to point 2.5 miles north of Clay

Alabama House, 6.9 miles west of, 1.4 miles west of Weiss ranch house, junction of road, south side of road, at fence line; iron post stamped "BB 3 1907 141"	141.486
Clay, 3.8 miles northeast of, west side of road, 10 feet south of gate to ranch house, 25 feet west of gate to Mound ranch, at junction of road from Slough House to Clay; iron post stamped "BB 1907 4 113"	112.710
Clay, 2.5 miles north of, where lane from house intersects road; iron post stamped "B 1907 33 103"	103.820

From new Grant gate south to point 1.7 miles south of Dry Creek Schoolhouse

Swifts ranch, 400 feet west of ranch house, 10 feet north of road; iron post stamped "B 1907 153 25"	153.778

Bench mark at Tree East triangulation station (by double spur line in 1908)

Slough House, 1 mile southwest of, Tree East triangulation station, on land owned by Archie Mull, on Jackson road from Sacramento, near Cosumnes post office, on west side of road, at foot of tree, about 16 inches above ground; iron post	190.379

From Lodi east along wagon road to Lockeford, thence north to Dry Creek

	Feet
Lodi, 1.2 miles south of, east of railroad at crossing, north of road, at angle of fence; iron post stamped "45"	45.846
Lodi, 3.6 miles east of, where road from south joins Lodi-Lockeford road, angle of fence; iron post stamped "B 1907 72"	72.083
Lockeford, at northwest corner of school grounds; iron post stamped "B 1907 101 8"	101.311
Lockeford, 5.8 miles north of, southwest corner of Elliott School grounds; iron post stamped "B 1907 105 15"	105.649

From Elliott west along road to cemetery entrance

Galt, 4.6 miles east of, at intersection of roads; iron post stamped "B 1907 64 16"	64.179

From Lockeford east along wagon road to Clements, thence north to point 1.7 miles south of Dry Creek School

Clements, in front of Leo Friedberger's store; tablet stamped "B 1907 131 11"	131.236
Clements, 4.4 miles north of, 20 feet west of road, in front of deserted house; iron post stamped "B 1907 214 26"	214.312

From Lockeford south along wagon road to Farmington road

Lockeford, 4 miles south of, 40 feet southeast of where Lodi-San Andreas road crosses Lockeford-Stockton road, at fence corner; iron post stamped "B 1907 80 9"	80.019
Lockeford, 8 miles south of, angle of fence at intersection of roads; iron post stamped "B 1907 72 10"	72.143
Farmington, near junction with Farmington road; iron post stamped "67"	67.051

From Clements south along wagon road to point near Peters

Clements, 3.0 miles east of, at intersection of roads; iron post stamped "B 1907 192 12"	192.308
Clements, 8 miles southeast of, at section corner, on north side of road; iron post stamped "B 1907 194 13"	194.362
Bellota, northeast corner of post office; iron post stamped "B 1907 130 14"	130.792
Peters, near southeast corner of junction of Peters-Linden road; iron post stamped "102"	102.325

From Galt west along road via New Hope to Walnut Grove

Galt, 3.5 miles west of, north side of road, 200 feet east of intersection of fence from north; iron post stamped "B 1907 29 17"	29.027
New Hope, Don Ray & Co.'s store, southwest corner of cement porch; aluminum tablet stamped "B 1907 13 18"	13.514
New Hope, Don Ray & Co.'s store, south door of; center of metal doorsill (county bench mark)	13.92

From Lodi west along road via Woodbridge to Brack's Landing

Lodi, northwest corner of opera house; aluminum tablet stamped "B 1907 50 21"	51.064
Woodbridge, northwest corner of Masonic Hall; aluminum tablet stamped "B 1907 45 19"	46.365
Woodbridge, 3 miles west of, intersection of roads; iron post stamped "B 1907 29 20"	29.609

Spur from Brack's Landing west 5 miles to point near pumping plant (stopped by overflow)

	Feet
Brack's Landing, southeast corner of warehouse; iron post stamped "B 1907 6 41"	6.668

From Brack's Landing southeast to Kettleman's ranch, thence east to Southern Pacific R. R. milepost 99

Brack's Landing, 4.7 miles south of, on Terminus road, 400 feet west of levee, north side of road; iron post stamped "B 1907 38" (erroneously stamped 4)	1.563
Brack's Landing, 9.6 miles southeast of, 500 feet south of Kettleman's ranch house, in fence corner; iron post stamped "1907 B 9 39"	9.882

From intersection of Eightmile House and Lower Sacramento roads south to Fivemile House, thence east to Southern Pacific R. R. and north along railroad to milepost 97

Fivemile House, 1,000 feet north of, west edge of Lower Sacramento road where lane from west intersects; iron post stamped "B 1907 13 40"	13.623
Lodi, 7.2 miles south of, 15 feet north of milepost 97; iron post stamped "B 1907 28"	28.671

SACRAMENTO QUADRANGLE

[Latitude 38° 30′–39°; longitude 121°–121° 30′]

ELDORADO, PLACER, SACRAMENTO, AND SUTTER COUNTIES

Precise leveling by the U. S. Coast and Geodetic Survey

From Clippergap southwest along Southern Pacific R. R. to Brighton

	Feet
Clippergap, 1 mile northeast of, about 1.2 meters from east end of tunnel O of the westbound line of the Southern Pacific R. R., on south stone wall, 0.6 meter above top of rail; red metal disk (U. S. C. & G. S. b. m. G–10)	1,867.516
Clippergap, 0.2 mile east of Southern Pacific R. R. station, on top of old foundation of water tank (now removed), about 0.5 meter below top of rail; red metal disk (U. S. C. & G. S. b. m. F–10)	1,755.751
East Auburn, opposite Southern Pacific R. R. passenger and freight station, on old line (now the westbound line) of Southern Pacific R. R., on eastern one of two northwestern concrete pillars under water tank, about 1 meter above top of rail; red metal disk (U. S. C. & G. S. b. m. E–10)	1,359.026
Newcastle, about 0.2 mile east of, at west end of Southern Pacific R. R. tunnel, north of track, on top surface of bottom stone of tunnel lining, 0.3 meter above track; red metal disk (U. S. C. & G. S. b. m. D–10)	975.825
Rocklin, about 0.5 mile east of, on west side of concrete bridge of Southern Pacific R. R., which carries the eastbound track over the westbound track; north of westbound track and about 1 meter above it, about 0.46 meter from north edge of pier, 1.5 meters above ground; red metal disk (U. S. C. & G. S. b. m. C–10)	251.824
Roseville, about 0.8 mile east of Southern Pacific R. R. station, on top surface of granite abutment at east end of railroad bridge 107D, on south side of track and about 0.5 meter below it; red metal disk (U. S. C. & G. S. b. m. B–10)	172.742

	Feet
Roseville, on top surface of concrete base of signal tower 1067, 70 meters west of Southern Pacific R. R. station; 10 meters north of track and about 0.6 meter above it; red metal disk (U. S. C. & G. S. b. m. A–10)	160.151
Antelope, about 2 miles northeast of, at a highway crossing, north of Southern Pacific R. R. track, 7 meters south of north line fence, 1.6 meters from a fence located 18 meters north of track, about 3 meters above the track; G. S. iron post stamped "146" (U. S. C. & G. S. b. m. Z–9)	146.450
Antelope, 90 meters west of Southern Pacific R. R. station, on top surface of north head wall of stone culvert under Southern Pacific track, about 1.2 meters below the track; red metal disk (U. S. C. & G. S. b. m. Y–9)	156.689
Benali, 1.2 miles northeast of, on top surface of stone abutment at east end of Southern Pacific R. R. steel bridge 96C, about 0.6 meter below the track; red metal disk (U. S. C. & G. S. b. m. X–9)	52.257
Elvas, at milepole 92, 0.4 mile north of Elvas tower, on top of south concrete abutment of Southern Pacific R. R. steel bridge over American River, east of track, 2.5 meters below top of rail; red metal disk (U. S. C. & G. S. b. m. W–9)	39.957
Brighton, 100 meters east of station, on top surface of southwestern one of four pillars under Southern Pacific R. R. water tank, about 3.4 meters above the ground; red metal disk (U. S. C. & G. S. b. m. V–9)	49.941

Precise leveling by the U. S. Coast and Geodetic Survey over primary leveling by L. F. Biggs in 1908

At Rocklin

Rocklin, 60 feet northeast of station, in foundation at southwest corner of roundhouse; aluminum tablet stamped "244 B 1908 B. X."	244.929

VACAVILLE QUADRANGLE

[Latitude 38° 15′–38° 30′; longitude 121° 45′–122°]

SOLANO COUNTY

Precise leveling by C. H. Semper in 1901

From Suisun northeast along Southern Pacific R. R. to Tremont

	Feet
Suisun, 3.9 miles north of, 25 feet east of track, 3 feet south of milepost 53; iron post stamped "47 B"	47.347
Vanden, in front of station; top of rail	73.9
Cannon, 12 feet south of station, 12 feet west of track; iron post stamped "89 B"	89.172
Cannon, in front of station; top of rail	88.3
Cannon, 2.6 miles north of, west side of track, 8 feet south of milepost 59; iron post stamped "80 B"	80.817
Elmira, in front of station; top of rail	75.5
Elmira, 1.7 miles north of, 33 feet east of track, 2 feet west of milepost 62; iron post stamped "62 B"	62.814
Batavia, 2 feet from north end of station, 27 feet east of track; iron post stamped "62 B"	62.298

	Feet
Dixon, 700 feet south of station, west side of track, at highway crossing, south side of road, at corner of fence; iron post stamped "61 B"	61.842
Dixon, in front of station; top of rail	63.5
Dixon, 2.4 miles north of, east side of track, 3 feet from milepost 71; iron post stamped "58 B"	58.170
Tremont, in front of station; top of rail	59.5

Primary leveling by R. A. Farmer in 1904 and C. H. Semper in 1905

From Binghamton west along highway to Elmira

Binghamton post office, 5 feet east of northeast corner of; iron post stamped "35 B"	35.119
T. 6 N., R. 1 E., near quarter corner between secs. 27 and 28, west side of road, at southeast corner of field; iron post stamped "44 B"	44.333
Elmira, 200 feet north of, 40 feet west of track, 8 feet north of telegraph pole; iron post stamped "72 B"	72.787

From sec. 36, T. 5 N., R. 1 E., northeast to center of T. 6 N., R. 2 E.

T. 5 N., R. 1 E., northeast corner of sec. 13, west side of road; iron post stamped "15 B"	15.219
Main Prairie, 200 feet north of old hotel, 100 feet west of barn, west side of road; iron post stamped "7 B"	7.587

From Cannon along wagon road to triangulation station

Triangulation station, 400 feet east of railroad, 0.5 mile northwest of Cannon; iron post stamped "163 B"	163.904

From Winters south along Southern Pacific R. R. to Elmira

Wolfskill station, at signboard; top of east rail	124.3
Allendale, in front of station; top of west rail	120.4
Allendale, 350 feet south of signboard, west of track, south of road crossing, 10 feet north of telegraph pole; iron post stamped "117 B"	117.606
Hartley, 400 feet south of signboard at station, east side of track, north of road crossing; iron post stamped "115 B"	115.617
Violet, in front of station; top of west rail	139.6
Vacaville station, 350 feet west of track, north of street, 8 feet east of telephone pole, at corner of railroad lot; iron post stamped "164 B"	164.678
Vacaville, at northwest corner of public schoolhouse, 4 feet above ground; bronze tablet stamped "188 B"	188.257
Vacaville, in front of station; top of west rail	162.4
Elmira, 200 feet north of station, 40 feet west of track, 8 feet north of telephone pole; iron post stamped "72 B"	72.787

From Tremont west via Curry School to point near Wolfskill

Curry School, at northwest angle of crossroads; iron post stamped "85 B 1904 2"	85.568
Curry School, 3.7 miles west of, southeast angle of crossroads; iron post stamped "103 B"	103.689

WOODLAND QUADRANGLE

[Latitude 38° 30′–38° 45′; longitude 121° 45′–122°]

SOLANO AND YOLO COUNTIES

Precise leveling by C. H. Semper in 1901–2

Near Tremont

	Feet
Tremont, 1.3 miles north of, east side of track, 5 feet from milepost 74; iron post stamped "49 B"	49.448

North along Southern Pacific R. R.

Davis, 3.2 miles north of, on east side of railroad, 30 feet north of milepost 80; iron post stamped "48 B 1902"	48.978
Davis, 6.1 miles north of, on east side of railroad, 300 feet north of milepost 83, at railroad crossing; iron post stamped "53 B 1902"	53.886
Woodland, at southeast corner of railroad park at station, 5 feet north of water tank; iron post stamped "60 B 1902"	60.850
Woodland, near station, at railroad crossing; top of rail	61.4
Woodland, 2.6 miles north of, on east side of railroad, at fence line, at milepost 89; iron post stamped "62 B 1902"	62.172

Primary leveling by R. A. Farmer and C. H. Semper in 1904

From Yolo south along Southern Pacific R. R. to Woodland

Yolo, 150 feet north of station, north of road; iron post stamped "74 B"	73.522
Yolo, 0.8 mile south of, north abutment of bridge over Cache Creek, west end, top of parapet wall; aluminum tablet stamped "89 B"	90.025
Woodland, 2.2 miles north of, north of road, 250 feet east of track, at southwest corner of Taylor Bros.' farm; iron post stamped "64 B"	64.586
Woodland, southeast corner of Yolo County Savings Bank; aluminum tablet stamped "71 B"	71.324

From Yolo west via county road to forks of road 1 mile west of Blickley ranch

Yolo, 3.9 miles west of, north side of road, at gate leading to Fred Market's ranch house; iron post stamped "169 B"	169.883
Yolo, 7.4 miles west of, at southeast angle of crossroads, 650 feet south of J. C. Holverstott's ranch house; iron post stamped "169 B"	169.768

From Woodland west to Madison

Woodland station, 8 feet north of water tank; iron post stamped "60 B"	60.860
Woodland, 4.4 miles west of, in south face of northwest monument of Yolo base, U. S. Coast and Geodetic Survey, stamped "155 B"	155.633
Woodland, 5 miles west of, on east line of Guersisosi grant; iron post stamped "108 B"	108.611
Madison, in front of station; top of east rail	144.1
Madison, 200 feet southwest of station, south of Main St., 8 feet west of telephone pole; iron post stamped "150 B"	150.626

From Madison south along Southern Pacific R. R. to Winters

	Feet
Citrona, in front of station; top of west rail	163.2
Citrona, 60 feet west of warehouse, west side of road; iron post stamped "162 B"	162.656
Ely, in front of station; top of west rail	174.6
Ely, 100 feet west of warehouse, 60 feet west of signboard, west side of road; iron post stamped "175 M"	175.604
Winters, 200 feet south of station, 40 feet west of track, 50 feet east of street; iron post stamped "131 B"	131.611
Winters, in front of station; top of west rail	131.5

From French place northeast to Winters and return

Winters, 10 feet from fence, at west side of public-school grounds; iron post stamped "133 B"	133.443

From point 3.2 miles north of Davisville west along county road to Ely

Davisville, 3.2 miles north of, 30 feet north of milepost 80; iron post stamped "48 B"	49.000
Plainfield, southeast angle of crossroads; iron post stamped "70 B"	70.532
Plainfield, 3 miles west of, at signboard, northwest angle of crossroads; iron post stamped "90 B"	90.731

From crossroads 3 miles west of Plainfield north along county road to northwest monument U. S. Coast and Geodetic Survey, Yolo base

Stoddard School, 3.4 miles north of, at northeast angle of crossroads; iron post stamped "96 B"	96.542

From crossroads 3 miles west of Plainfield south via county road to Curry School

Fairfield School, 1 mile south of, northeast angle of crossroads, at fence; iron post stamped "92 B"	92.423

From point 1 mile south of Fairfield School east and south to U. S. Coast and Geodetic Survey monument

Miller ranch, north bank of Putah Creek, U. S. Coast and Geodetic Survey monument, north face; aluminum tablet stamped "74 B"	74.471

DEGREE QUADRANGLE 39°–40°, 120°–121°

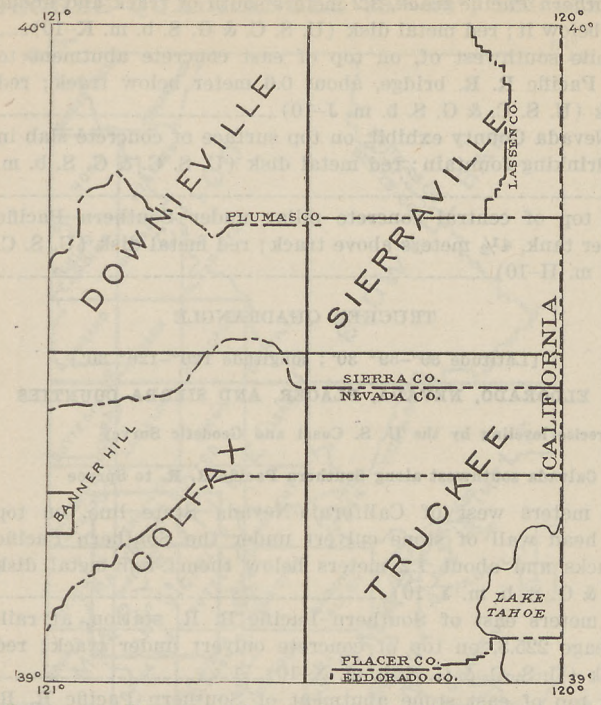


FIGURE 43.—Diagram of degree quadrangle 39°–40°, 120°–121°

COLFAX QUADRANGLE

[Latitude 39°–39° 30′; longitude 120° 30′–121°]

NEVADA, PLACER, AND SIERRA COUNTIES

Precise leveling by the U. S. Coast and Geodetic Survey

From Cisco southwest along Southern Pacific R. R. to Lander

	Feet
Cisco, 50 meters west of Southern Pacific R. R. station, 10 meters north of snowshed, about 1.5 meters below track, on top of large boulder; red metal disk (U. S. C. & G. S. b. m. P–10)	5,922.560
Emigrant, 3 meters east of Southern Pacific R. R. station, 2 meters outside of snowshed on south side of track, about 0.6 meter above track, on top of large flat boulder; red metal disk (U. S. C. & G. S. b. m. O–10)	5,212.079
Blue Canyon, on face of concrete drinking fountain, at Southern Pacific R. R. station, about 1.2 meters above track; red metal disk (U. S. C. & G. S. b. m. N–10)	4,691.418
Orel, 200 meters east of Southern Pacific R. R. station, on top surface of the central concrete pillar under water tank, about 0.3 meter above track; red metal disk (U. S. C. & G. S. b. m. M–10)	4,418.587
Towle, 0.3 mile east of Southern Pacific R. R. station, 90 meters east of milepole 158, 20 meters north of track and about 1.5 meters above it, on top of a boulder 1 meter high; red metal disk (U. S. C. & G. S. b. m. L–10)	3,723.877

	Feet
Gold Run, 0.6 mile west of Southern Pacific R. R. passenger station, on top surface of south head wall of concrete culvert 152D under Southern Pacific track, 3.2 meters south of track and about 0.6 meter below it; red metal disk (U. S. C. & G. S. b. m. K–10)	3,172.684
Wirt, 0.3 mile southwest of, on top of east concrete abutment to Southern Pacific R. R. bridge, about 0.6 meter below track; red metal disk (U. S. C. & G. S. b. m. J–10)	2,401.642
Colfax, at Nevada County exhibit, on top surface of concrete slab in front of drinking fountain; red metal disk (U. S. C. & G. S. b. m. I–10)	2,415.097
Lander, on top of central concrete pillar under Southern Pacific R. R. water tank, 4½ meters above track; red metal disk (U. S. C. & G. S. b. m. H–10)	2,295.773

TRUCKEE QUADRANGLE

[Latitude 39°–39° 30′; longitude 120°–120° 30′]

ELDORADO, NEVADA, PLACER, AND SIERRA COUNTIES

Precise leveling by the U. S. Coast and Geodetic Survey

From Calvada southwest along Southern Pacific R. R. to Spruce

	Feet
Calvada, 5 meters west of California-Nevada State line, on top of north head wall of stone culvert under the Southern Pacific R. R. tracks and about 1.2 meters below them; red metal disk (U. S. C. & G. S. b. m. Y–10)	5,032.372
Mystic, 65 meters east of Southern Pacific R. R. station, at railroad mileage 225.8, on top of concrete culvert under track; red metal disk (U. S. C. & G. S. b. m. X–10)	5,160.925
Iceland, on top of east stone abutment of Southern Pacific R. R. bridge 200G over Truckee River; red metal disk (U. S. C. & G. S. b. m. W–10)	5,409.796
Prosser Creek, 0.5 mile west along Southern Pacific R. R. track from bridge over Prosser Creek, on top of large volcanic boulder; red metal disk (U. S. C. & G. S. b. m. V–10)	5,609.926
Truckee, 30 meters west of Southern Pacific R. R. passenger station, on top surface of northwestern one of four central pillars under water tank, about 1.2 meters above rail; red metal disk (U. S. C. & G. S. b. m. U–10)	5,819.739
Tunnel, 0.4 mile east of Southern Pacific R. R. station (tunnel 13), 150 meters east of east end of snowshed, on top of south head wall of stone culvert 201F under track; red metal disk (U. S. C. & G. S. b. m. T–10)	6,325.847
Eder, about 0.25 mile east of, 15 meters west of Southern Pacific R. R. milepole 198, 100 meters west of east end of siding, in snowshed, on stone retaining wall, about 1 meter above track; red metal disk (U. S. C. & G. S. b. m. S–10)	6,579.869
Summit, on front wall of concrete Southern Pacific R. R. station, between two front windows, about 1.2 meters above track; red metal disk (U. S. C. & G. S. b. m. R–10)	6,964.733
Spruce, 0.5 mile west of, on top of granite abutment of Southern Pacific bridge south of track, about 0.6 meter below it; red metal disk (U. S. C. & G. S. b. m. Q–10)	6,511.644

DEGREE QUADRANGLE 39°–40°, 121°–122°

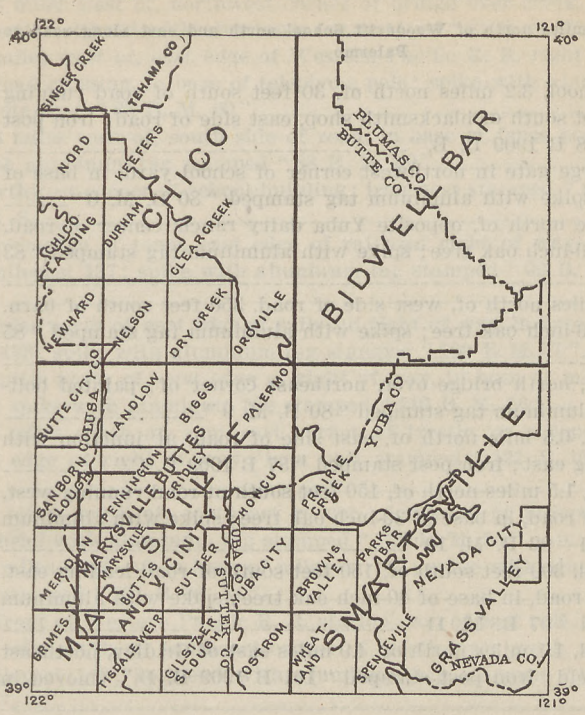


FIGURE 44.—Diagram of degree quadrangle 39°–40°, 121°–122°

BIGGS, GRIDLEY, HONCUT, AND PALERMO QUADRANGLES

[Latitude 39° 15′–39° 30′; longitude 121° 30′–121° 45′]

BUTTE, SUTTER, AND YUBA COUNTIES

Primary leveling by L. F. Biggs and W. H. Barringer in 1909

From point 7.1 miles northeast of Marysville northeast 10 miles, thence west to Honcut (portion of line)

	Feet
Nigger Jack Slough, 3.8 miles north of, southeast corner of second-class road to east, in base of fence post; spike with aluminum tag stamped "102 B. M. 66"	102.35
Nigger Jack Slough, 4.9 miles north of, east edge of road, at section line, in base of fence post; spike with aluminum tag stamped "106 B. M. 67"	108.01
Honcut, 3 miles northeast of, at junction of roads, opposite schoolhouse, at small gate to school yard, in base of 20-inch oak tree; spike with aluminum tag stamped "137 B. M. 75"	137.78
Honcut, 1.3 miles east of, at intersection of north-south road, west end of old store, at fence line; iron post stamped "116 B 1909 B X"	116.464

	Feet
Honcut, 0.8 mile east of, northwest corner of bridge over Honcut Creek, in top of chord; spike with aluminum tag stamped "114 B. M. 76"	113.88
From point 2.6 miles north of Wooddrift School north and east along road to Palermo	
Wooddrift School, 3.2 miles north of, 30 feet south of road running east, 300 feet south of blacksmith shop, east side of road; iron post stamped "78 B 1909 B. B."	78.011
Honcut, at large gate in northwest corner of school yard, in base of gate post; spike with aluminum tag stamped "80 B. M. 6"	80.66
Honcut, 1 mile north of, opposite Yuba dairy ranch, center of road, in base of 30-inch oak tree; spike with aluminum tag stamped "83 B. M. 7"	83.09
Honcut, 2.2 miles north of, west side of road, 350 feet south of barn, in base of 36-inch oak tree; spike with aluminum tag stamped "85 B. M. 8"	85.39
Honcut Creek, north bridge over, northeast corner of; painted bolthead with aluminum tag stamped "80 B. M. 9"	80.11
Honcut Creek, 0.8 mile north of, east side of road, at junction with road running east; iron post stamped "87 B 1909 B. C."	87.088
Honcut Creek, 1.5 miles north of, 150 feet south of road running west, west edge of road, in base of 30-inch oak tree; spike with aluminum tag stamped "92 B. M. 10"	92.65
Central School, 300 feet south of, 150 feet south of road leading east, east side of road, in base of 40-inch oak tree; spike with aluminum tag stamped "97 B. M. 11"	97.06
Central School, 1.1 miles north of, 4.9 miles east of Gridley, northeast corner of field; iron post stamped "101 B 1909 B. D." (moved in 1922)	101.133
Union School, 2 miles north of, west side of road, opposite bend, in base of telephone pole; spike with aluminum tag stamped "102 B. M. 47"	102.65
Union School, 3 miles north of, west side of road, at bend of road, 1,000 feet north of lane to house, in base of telephone pole; spike with aluminum tag stamped "103 B. M. 48"	103.81
Union School, 4.1 miles north of, 4.8 miles southwest of Palermo, west edge of road, at section line, southeast corner of small alfalfa field, 500 feet south of house; iron post stamped "119 B 1909 B. O."	119.645
Union School, 4.6 miles north of, 4.3 miles southwest of Palermo, west side of road, at intersection of road to east, in base of telephone pole; spike with aluminum tag stamped "111 B. M. 49"	111.40
Palermo, 3.1 miles west by 0.6 mile south of, center of road, 0.2 mile north of small house, in base of 30-inch oak tree; spike with aluminum tag stamped "127 B. M. 50"	127.06
Palermo, 2.6 miles west of, at intersection of east and west road, southwest corner of road, 600 feet west of house; iron post stamped "139 B 1909 B. P."	139.485
Palermo, 1.6 miles west of, 25 feet west of intersection of north-south road, in base of telephone pole; spike with aluminum tag stamped "138 B. M. 51"	138.65
Palermo, 1.1 miles west of, southwest corner of bridge over small creek, in top of chord; bolthead with aluminum tag stamped "154. B. M. 52"	154.04

From Honcut Creek east to Honcut, thence north to Oroville

	Feet
Honcut Creek, 0.8 mile north of, east side of road, at intersection of road to east; iron post stamped "87 B 1909 B. C."	87.088
Honcut, 2.8 miles west of, northwest corner of bridge over creek, in top of chord; bolthead with aluminum tag stamped "81 B. M. 61"	81.27
Honcut, 2 miles west of, east edge of Western Pacific R. R. right of way, at road crossing, in base of telephone pole; spike with aluminum tag stamped "83 B. M. 60"	83.03
Honcut, 1.3 miles west of, south side of road, in base of fence post; spike with aluminum tag stamped "88 B. M. 59"	88.87
Honcut, northwest corner of school building; iron post stamped "106 B 1909 B. S."	106.812
Honcut, north edge of town, east edge of railroad right of way, in base of milepost 137; spike with aluminum tag stamped "99 B. M. 58"	99.64
Honcut, 2 miles north of, east edge of railroad right of way, in base of milepost 138; spike with aluminum tag stamped "100 B. M. 57"	100.75
Honcut, 3 miles north of, east edge of right of way, in base of milepost 139; spike with aluminum tag stamped "112 B. M. 56"	112.70
Palermo, 3 miles south of, southeast corner of trestle, at milepost 140, east edge of right of way; iron post stamped "121 B 1909 B. R."	121.454
Palermo, 3 miles south of, southeast corner of trestle, at milepost 141; bolthead with aluminum tag stamped "122 B. M. 55"	122.64
Palermo, 2 miles south of, in base of milepost 142; spike with aluminum tag stamped "131 B. M. 54"	131.77
Hearst, in front of Western Pacific R. R. station; top of east rail	140.7
Palermo, 1 mile south of, southeast corner of trestle over creek, opposite milepost 143; bolthead with aluminum tag stamped "149 B. M. 53"	149.76
Palermo, in front of Southern Pacific R. R. station; top of rail	154.4
Palermo, southwest corner of brick schoolhouse, 5 feet above ground; aluminum tablet stamped "170 B 1909 B. Q."	170.037
Oroville, Southern Pacific R. R. station, 4.8 miles south of, 0.5 mile north of Palermo station, 20 feet south of signboard 143 C, south of road crossing and east side of track, in base of telegraph pole; spike with aluminum tag stamped "161 B. M. 21"	161.62
Oroville, 3.7 miles along railroad track south of, at first road crossing south of Villa Verona, in corner of right of way fence; iron post stamped "205 B 1909 B. K."	206.041
Oroville, 2.5 miles south of, on west side of railroad track, in base of telegraph pole; aluminum tag stamped "221 B. M. 20"	221.56
Oroville, Southern Pacific R. R. station, 1.5 miles south of, east side of right of way, in base of telegraph pole; spike with aluminum tag stamped "198 B. M. 19"	198.53
Oroville, Southern Pacific R. R. station, 1 mile south of, east side of track, in base of signboard reading "Station 1 mile"; spike with aluminum tag stamped "178 B. M. 18"	178.62

From Gridley east 4 miles, thence north by road and electric railroad to Tres Vias

Gridley, in front of station; top of rail	93.7
Gridley, 500 feet south of station, 50 feet east of railroad track, south of road, in base of telephone pole 15; spike with aluminum tag stamped "90 B. M. 15"	90.68

	Feet
Gridley, 0.7 mile east of, south of road, opposite brown house, in base of 40-inch oak tree; spike with aluminum tag stamped "94 B. M. 14"	94.48
Gridley, Northern Electric R. R. crossing at station; top of east rail	98.4
Gridley, 1.8 miles east of, center of north-south road, 1,500 feet east of Northern Electric R. R., in base of 40-inch oak tree; spike with aluminum tag stamped "94 B. M. 13"	93.79
Gridley, 1.8 miles east by 1.2 miles north of, 500 feet east of Oro Rancho station on Northern Electric R. R., in base of 60-inch oak tree; spike with aluminum tag stamped "98 B. M. 77"	98.49
Oro Rancho, 0.4 mile northeast of, 30 feet north of Butte County Canal, at Allen ranch, in base of telephone pole; spike with aluminum tag stamped "101 B. M. 78"	101.48
Butte County Canal; surface of water, May 5, 1909	96.3
Oro Rancho, 1.4 miles northeast of, west side of road, opposite Reed ranch house, in base of gatepost; spike with aluminum tag stamped "99 B. M. 79"	99.693
Biggs, 3 miles east of, 0.3 mile east of Northern Electric R. R., at intersection of road west, northeast corner of orchard; iron post stamped "109 B 1909 B. Y."	109.634
Hume, Northern Electric R. R. station, north of road and east side of track, in base of road-crossing signpost; spike with aluminum tag stamped "1180 B. M. 26"	110.51
Tres Vias, 5 miles south of, 1 mile north of Hume, at road crossing, in base of north pole of overhead crossing poles; spike with aluminum tag stamped "114 B. M. 25"	114.71
Tres Vias, 3.9 miles south of, at road crossing, in deep cut, in embankment, on north side of road, in base of post of cattle guard; spike with aluminum tag stamped "129 B. M. 24"	130.23
Tres Vias, 3 miles south of, at road crossing; iron post stamped "121 B 1909 B. L."	121.754
Tres Vias, 2 miles south of, at road crossing, east side of track, in base of right of way post; spike with aluminum tag stamped "135 B. M. 23"	135.61
Tres Vias, 1.1 miles south of, at road crossing, in base of north pole of overhead crossing poles; spike with aluminum tag stamped "153 B. M. 22"	153.71
Tres Vias, 200 feet south of Northern Electric R. R. station, northwest corner of school yard; iron post stamped "160 B 1909 B. G."	161.057

From Biggs east 3 miles

Biggs, 1.3 miles north of, west edge of railroad right of way, where wagon road turns west, in base of telephone pole; spike with aluminum tag stamped "91 B. M. 83"	91.07
Biggs, in front of station; top of rail	94.6
Biggs, 1.3 miles east of, southeast corner of intersection of north-south road, in base of telephone pole; spike with aluminum tag stamped "96 B. M. 82"	96.648
Biggs, 2.1 miles east of, southeast corner of bridge over Butte County canal, in bulkhead; spike with aluminum tag stamped "106 B. M. 81"	106.61
Biggs Junction, Northern Electric R. R. station, east line of right of way, in base of telephone pole; spike with aluminum tag stamped "107 B. M. 80"	107.14

From point 3.9 miles east of Gridley west to Feather River

	Feet
Gridley, 3.9 miles east of, northwest corner of steel bridge over slough, in chord; spike with aluminum tag stamped "100 B. M. 12"	99.10
Gridley, 2.7 miles east of, southwest corner of bridge over Feather River, in concrete abutment; aluminum tablet stamped "102 B 1909 B. E."	101.174
Gridley, 2.7 miles east of, on southwest pier of Feather River Bridge; 25-foot mark on water gage	100.131
Gridley, 2.7 miles east of, surface of water in Feather River, April 22, 1909	86.4

From point 1 mile north of Silsby east and north along highway to point 2 miles west of Tres Vias

Silsby, in front of station signpost; top of rail	109.0
Silsby, 1,000 feet south of station signpost, at road crossing, 150 feet east of track, on north side of road, in base of right of way fence post; spike with aluminus tag stamped "102 B. M. 10"	102.60
Silsby, 1 mile east of, small bridge over creek, in floor at west end; copper brad with aluminum tag stamped "109 B. M. 11"	109.62
Silsby, 2 miles east of, southeast corner of field, in base of fence post; spike with aluminum tag stamped "108 B. M. 12"	109.18
Silsby, 3.2 miles east of, 8 miles west by 1 mile south of Oroville, at crossroads, 50 feet north of power pole 22–6; iron post stamped "112 B 1909 B. F."	113.026
Oroville, 8 miles west of, at intersection of county roads and power lines, in base of power pole 21–4; spike with aluminum tag stamped "123 B. M. 13"	124.10

From point 2 miles west of Liveoak south via highway 4 miles

Liveoak, 2 miles west of, north side of road, at intersection of north-south road, in base of fence post; spike with aluminum tag stamped "71 B. M. 29"	72.03
Liveoak, 2.8 miles west of, 4 miles north of Union School, east side of road, at section corner, in base of fence post; spike with aluminum tag stamped "70 B. M. 46"	71.21
Union School, 3.2 miles north by 1 mile east of, north side of road, 10 feet east of bridge over drain, in base of fence post; spike with aluminum tag stamped "69 B. M. 45"	68.79
Union School, 2 miles north by 1 mile east of, north edge of road, at section line, 500 feet east of small house; iron post stamped "65 B 1909 B. N."	65.634

From Gridley west and south to Liveoak (part of line)

Gridley, 1 mile west of, south side of road, at corner of road leading south, in base of power pole; spike with aluminum tag stamped "87 B. M. 16"	87.60
Gridley, 1.5 miles west of, south of road, at junction of road south, in base of telephone pole; spike with aluminum tag stamped "85 B. M. 17"	85.34
Gridley, 2.8 miles west of, 200 feet west of place where telephone line crosses to north side of road, north edge of road, at section line; iron post stamped "81 B 1909 B. F."	81.798

	Feet
Liveoak, 4 miles west of, 3.7 miles southeast of Pennington, south side of road, opposite small house, 15 feet east of gate; iron post stamped "72 B 1909 B. J."	72.519
Liveoak, 3.3 miles west of, on southwest corner of concrete culvert over drain; chisel point, painted "72 B. M. 28"	72.99
Liveoak, 2.3 miles west of, north side of road, at intersection of north-south road, in base of fence post; spike with aluminum tag stamped "71 B. M. 29"	72.03
Liveoak, 1.4 miles west of, south side of road, at intersection of north-south road, in base of telephone pole; spike with aluminum tag stamped "73 B. M. 30"	73.84
Liveoak, opposite north end of large warehouse, west edge of railroad right of way, 25 feet south of railroad crossing, in base of telephone pole; spike with aluminum tag stamped "74"	75.00

BUTTE CITY, LANDLOW, SANBORN SLOUGH, AND PENNINGTON 7½′ QUADRANGLES

[Latitude 39° 15′–39° 30′; longitude 121° 45′–122°]

BUTTE, COLUSA, AND SUTTER COUNTIES

Primary leveling by L. F. Biggs and W. H. Barringer in 1909

From Biggs west to Princeton

	Feet
Biggs, 0.7 mile north of, west edge of railroad right of way, where wagon road turns west, in base of telephone pole; spike with aluminum tag stamped "91 B. M. 83"	91.120
Biggs, 1.8 miles west of, southeast corner of bridge over drain, in concrete abutment; aluminum tablet stamped "86 B 1909 B."	86.767
Biggs, 2.6 miles west of, northwest corner of bridge over drain, in top of concrete abutment; spike with aluminum tag stamped "84 B. M. 85"	85.37
Biggs, 3.2 miles west of, northwest corner of bridge over Spring Valley Mining Co.'s canal, in top of chord; bolthead with aluminum tag stamped "90 B. M. 86"	90.64
Biggs, 3.6 miles west of, 100 feet west of junction of road to north, south side of road, in base of telephone pole; spike with aluminum tag stamped "79 B. M. 87"	80.22
Biggs, 4.7 miles west of, south side of road, at junction of road to north, in base of telephone pole; spike with aluminum tag stamped "76 B. M. 88"	76.92
Biggs, 5.4 miles west of, north side of road; iron post stamped "77 B 1909 B. A.-1"	78.255
Landlow schoolhouse, 1 mile west of, south side of road, 100 feet west of old barn, in base of cottonwood tree; spike with aluminum tag stamped "72 B. M. 94"	72.94
East fork of Butte Creek, 0.4 mile west of, south side of road, at section line, northeast corner of field; iron post stamped "70 B 1909 B. C. 1"	70.906
West fork of Butte Creek, northwest corner of bridge over, in floor; spike with aluminum tag stamped "72 B. M. 98"	73.04
Union School, 2 miles east of, at intersection of north-south road, northeast corner of field, in base of fence post; spike with aluminum tag stamped "71 B. M. 100"	71.68

	Feet
Union School, 2 miles east of, northeast corner of intersection of north-south road; iron post stamped "72 B 1909 B. D. 1"	72.760
Union School, 1 mile east of, north edge of road, on section line, in base of fence post; spike with aluminum tag stamped "71 B. M. 101"	72.45
Union School, 200 feet north of, 3 miles south of Butte City, 150 feet north of Marvin Chapel, northeast corner of churchyard, at intersection of north-south road; iron post stamped "74 B 1909 B. E. 1"	74.961
Union School, 1.5 miles west and 0.2 mile south of, at Flannigan's ranch, in yard, in base of 48-inch oak tree; copper brad with aluminum tag stamped "78 B. M. 36"	79.49
Princeton, at ferry crossing, on east river bank, in base of 36-inch oak tree; spike with aluminum tag stamped "72 B. M. 37"	73.40
Sacramento River, at Prince Ferry, surface of water May 25, 1909	66.4

From point 7.4 miles west of Biggs north along highway to Wilson (portion of line)

Biggs, 7.4 miles west by 1.5 miles north of, 2 miles west by 1.5 miles north of Landlow School, 20 feet south of northwest corner of fence, 0.25 mile west of white barn, in base of fence post; spike with aluminum tag stamped "77 B. M. 2"	77.17
Landlow School, 2 miles west by 2.5 miles north of, at intersection of county and second-class roads, 150 feet east of ranch house, 10 feet west of telephone pole; iron post stamped "81 B 1909 B. A."	81.445
Landlow School, 2 miles west by 5 miles north of, southeast corner of field, west of road, at fence corner; iron post stamped "92 B 1909 B. B."	92.856
Landlow School, 2 miles west by 6 miles north of, west side of road, in base of fence post near gate; spike with aluminum tag stamped "91 B. M. 5"	91.54

From point 2 miles west of Landlow School west and south to Union School

Landlow School, 2.3 miles west by 2.5 miles north of, 6.7 miles east of Butte City, in floor of Butte Creek bridge; copper brad with aluminum tag stamped "84 B. M. 27"	84.83
Butte City, 5 miles east of, on north side of road, near section fence line, in base of telephone pole; spike with aluminum tag stamped "77 B. M. 28"	77.856
Butte City, 3.5 miles east of, county road bridge over small slough, white house on west bank of slough, in floor at east end of bridge; copper brad with aluminum tag stamped "84 B. M. 29"	84.42
Butte City, 3.3 miles east of, at intersection of north-south and east-west roads, 1,500 feet east of ranch house in clump of trees and long barn on north side of road, northeast corner of roads; iron post stamped "80 B 1909 B. M."	80.783
Butte City, 2.3 miles east of, at junction with private road to south, south side of road, in base of fence post at gate; spike with aluminum tag stamped "81 B. M. 30"	81.52
Butte City, 1.2 miles east of, at intersection of north-south and east-west roads, in fence post which is evidently also a bench mark for some other survey, southeast corner of road crossing; 20-penny nail with aluminum tag stamped "81 B. M. 31"	81.06

	Feet
Butte City, at Nelson road entrance, 1,000 feet east of Doctor Gatliff's drug store, in base of telephone pole at street corner; spike with aluminum tag stamped "85 B. M. 32"	85.38
Butte City School, opposite, in corner of fences, at south end of blind street runnning north-south; iron post stamped "87 B 1909 B. N."	87.000
Butte City, 1.2 miles east by 1 mile south of, east side of road, at section fence line, in base of 12-inch by 12-inch post; spike with aluminum tag stamped "77 B. M. 33"	77.11
Butte City, 1.2 miles east by 2.2 miles south of, in center of county road, in base of large blazed oak tree; copper brad with aluminum tag stamped "78 B. M. 34"	78.45
Union School, 300 feet north of, 3 miles south by 1.2 miles east of Butte City, 150 feet north of Marvin Chapel, northeast corner of churchyard, at intersection of north-south road; iron post stamped "74 B 1909 B. E.–1"	74.963

From Parrott district school south along highway to point 3.3 miles east of Butte City (portion of line)

Butte City, 3 miles east by 2.4 miles north of, east edge of road, at second-class road to west, in base of telephone pole; spike with aluminum tag stamped "90 B. M. 75"	88.64
Butte City, 3 miles east by 1.4 miles north of, east edge of road, in base of second telephone pole south of bridge over drain; spike with aluminum tag stamped "85 B. M. 76"	83.67
Butte City, 3 miles east by 0.2 mile north of, southwest corner of bridge over slough, in floor; copper nail with aluminum tag stamped "85 B. M. 77"	83.74

From Union School south along highway to Colusa (portion of line)

Union School, 1 mile south of, in front of Boehmer's ranch, in base of telephone pole; spike with aluminum tag stamped "71 B. M. 38"	72.11
Union School, 1.5 miles south of, at Afton post office, on west side of road, in base of telephone pole; spike with aluminum tag stamped "70 B. M. 39"	70.83
Union School, 1.5 miles south by 1 mile west of, 25 feet east of east bank of Drum Kelley Slough, south side of road, in base of 48-inch oak tree; spike with aluminum tag stamped "75 B. M. 40"	75.45
Union School, 1.5 miles south by 2 miles west of, 2 miles west of Afton post office, at junction with road south to Colusa, 0.5 mile north of Warfield's ranch, north side of road; iron post stamped "77 B 1909 B. O."	77.497
Afton, 2 miles west by 1 mile south of post office, crossing of road over Sacramento River levee, 0.5 mile south of Warfield's ranch, east side of road, in base of telephone pole; spike with aluminum tag stamped "83 B. M. 41"	84.30
Afton, 2 miles west by 2 miles south of post office, 1 mile north of Harmony School, east of road at turn, 50 feet east of levee, in base of telephone pole; spike with aluminum tag stamped "76 B. M. 42"	76.54
Harmony School, 12 miles northeast of Colusa, in front of schoolyard and 5 feet north of gate; iron post stamped "76 B 1909 B. P."	76.853

	Feet
Harmony School, 0.3 mile south of, at turn in road, 1,000 feet west of ranch house, in base of telephone pole; spike with aluminum tag stamped "75 B. M. 43"	75.46
Harmony School, 1.3 miles south and 0.2 mile west of, at entrance to Moulton ranch, east side of road, in base of 12 by 12 inch gatepost; spike with aluminum tag stamped "70 B. M. 4"	71.09
Harmony School, 2 miles south of, 2 miles north of Butte Creek School, 20 feet north of entrance to ranch house, 2 feet north of telephone pole; iron post stamped "71 B 1909 B. Q.," pole painted "U. S. B. M."	71.520
Butte Creek School, 1 mile north of, 300 feet east of ranch house on west side of road, in base of gatepost of section line fence on east side of road; spike with aluminum tag stamped "70 B. M. 45"	70.71
Butte Creek School, in southwest corner of yard, in base of tree; spike with aluminum tag stamped "68 B. M. 46"	68.68
Butte Creek School, 1 mile south of, near gate on east side of road, 500 feet north of two large barns, 300 feet north of crossing over Sacramento River levee; iron post stamped "67 B 1909 B. R."	67.958
Butte Creek School, 2 miles south of, 6 miles north of Colusa, 1,500 feet south of jog in road on east side, in base of 24-inch oak tree; spike with aluminum tag stamped "62 B. M. 47"	63.02
Colusa, 5 miles north of, at turn in road to south, 600 feet south of Farnsworth ranch, in base of fence post at corner; spike with aluminum tag stamped "64 B. M. 48"	65.31
Colusa, 4 miles northeast of, 0.6 mile north of Washington School, 20 feet east of 40-inch oak tree, near gate; iron post stamped "59 B 1909 B. S."	59.610
Colusa, 3.4 miles northeast of, at Washington School, in base of tree in road; spike with aluminum tag stamped "62 B. M. 49"	62.39
From Gridley west and south to Liveoak (portion of line)	
Gridley, 3.8 miles west of, north of road at point where telephone line crosses to south of road, in base of telephone pole; spike with aluminum tag stamped "75 B. M. 18"	75.02
Gridley, 4.8 miles west of, north of road, at junction of north-south road, in base of telephone pole; spike with aluminum tag stamped "72 B. M. 19"	72.07
Gridley, 5.7 miles west of, 0.5 mile north of Butte School, at junction of road to south, north of road, 5 feet west of signpost; iron post stamped "71 B 1909 B. G."	71.293
Butte School, yard of, in base of gatepost; spike with aluminum tag stamped "71 B. M. 20"	71.46
Butte School, 0.5 mile south of, southwest corner of field at intersection of east-west road, in base of telephone pole; spike with aluminum tag stamped "67 B. M. 21"	67.66
Butte School, 1.5 miles south of, east of road at section line, in base of fence post; spike with aluminum tag stamped "71 B. M. 22"	71.48
Butte School, 2.5 miles south of, 2.1 miles north of Pennington, west edge of road, at intersection of east-west road, 500 feet west of large barn; iron post stamped "71 B 1909 B. H."	71.942
Pennington, 1.2 miles north of, west side of road, at fence line, in base of fence post; spike with aluminum tag stamped "68 B. M. 23"	68.46

	Feet
Pennington, 0.2 mile west of, at intersection of east-west road, northwest corner of concrete culvert; bolthead with aluminum tag stamped "79 B. M. 24"	79.80
Pennington, northwest corner of school yard, at fence line; iron post stamped "82 B 1909 B. I."	84.327
Pennington, 1.8 miles southeast of, south side of road, at junction of road to east, large gate to lane, in base of gatepost; spike with aluminum tag stamped "76 B. M. 26"	75.76
Pennington, 3 miles east of, 5 miles west of Live Oak, south side of road, at entrance of lane to house, in base of gatepost; spike with aluminum tag stamped "70 B. M. 27"	70.36
From point 3.5 miles east of meridian northwest and east along highway to Pennington (portion of line)	
Noyesburg, 2.5 miles northeast of schoolhouse, 6.7 miles west of Pennington, 200 feet east of turn in road, 150 feet east of sheep-dipping corral, in base of fence corner post; spike with aluminum tag stamped "62 B. M. 68"	63.45
Pennington, 5.5 miles west of, opposite private road to north, south side of road at turn, in base of telephone pole; spike with aluminum tag stamped "86 B. M. 69"	87.36
Pennington, 5.1 miles west of, at junction with private road to south, 20 feet north of gate at turn in road to northeast; iron post stamped "84 B 1909 B. Y."	85.860
Pennington, 4 miles west of, at turn in county road, small bridge over drainage ditch, at south side of road, in stringer; copper brad painted "64 B. M. 70"	65.31
Pennington, 3 miles west of, at turn in road to north, 2,000 feet south of large grove of oak trees, on northwest corner of road intersection, in fence corner; iron post stamped "75 B 1909 B. Z."	77.217
Pennington, 1.5 miles west of, at road corners north-south and east-west, in base of 36-inch oak tree; copper brad with aluminum tag stamped "80 B. M. 71"	81.81
From Landlow School south to point 5.7 miles west of Gridley	
Biggs, 5.4 miles west of, at Landlow School, northeast corner of school yard; iron post stamped "77 B 1909 B. A.–1"	78.238
Landlow School, 1.1 miles south of, west side of road, where road turns west, in base of fence post; spike with aluminum tag stamped "73 B. M. 89"	73.51
Landlow School, 2.2 miles south of, west side of second-class road through Balfour Guthrie ranch, 0.5 mile north of Guthrie house, in base of telephone pole; spike with aluminum tag stamped "69 B. M. 90"	69.95
Landlow School, 3 miles southeast of, 0.5 mile south of Balfour Guthrie ranch house; west bank of Spring Valley Mining Co.'s canal, 20 feet north of road; iron post stamped "75 B 1909 B. B.–1"	76.122
Balfour Guthrie ranch, 1 mile south of, 0.5 mile south of Spring Valley Mining Co.'s canal, on second-class road, west side of road, in base of fence post; spike with aluminum tag stamped "67 B. M. 91"	67.75
Gridley, 7.7 miles west of, at junction of second-class road through Guthrie ranch, in base of telephone pole; spike with aluminum tag stamped "67 B. M. 92"	67.83

Feet

Gridley, 6.6 miles west of, north edge of road, in base of telephone pole; spike and aluminum tag stamped "67 B. M. 93"_____ 67.73

Gridley, 5.7 miles west of, 0.5 mile north of Butte School, at junction of road to south, north edge of road, 5 feet west of signpost; iron post stamped "71 B 1909 B. G."_____ 71.293

CLEAR CREEK, DRY CREEK, AND OROVILLE 7½′ QUADRANGLES

Latitude 39° 30′–39° 45′; longitude 121° 30′–121° 45]

BUTTE COUNTY

Primary leveling by L. F. Biggs and W. H. Barringer in 1909

From Oroville northwest along highway and electric railroad to Sterling Junction

Feet

Oroville, Southern Pacific R. R. station, 200 feet south of, south side of road, east side of track, 6 feet east of railroad property line post; iron post stamped "205 B 1909 J"_____ 205.624

Oroville, northwest corner of steel bridge over Feather River, in concrete abutment, at end of railing; top of bolthead stamped B, painted "191 B. M. 44"_____ 193.21

Oroville, 0.6 mile north of, at crossroads, in base of signpost "Chico-Cherokee"; spike with aluminum tag stamped "267 B. M. 45"____ 268.84

Oroville, 1.5 miles north of, 15 feet east of fence line, where power line crosses road, in base of power pole 445; spike with aluminum tag stamped "266 B. M. 46"_____ 268.34

Oroville, 2.6 miles northwest of, northwest corner of field, 250 feet south of large barn, at foot of small ridge; iron post stamped "300B 1909 B 12"_____ 302.535

Oroville, 3.9 miles northwest of, east edge of road, at T road to west, in base of power pole 372; spike with aluminum tag stamped "291 B. M. 47"_____ 292.73

Oroville, 4.8 miles northwest of, east edge of road, in base of power pole 21–29; spike with aluminum tag stamped "311 B. M. 48"____ 313.25

Oroville, 5.8 miles northwest of, at Wick's ranch, at junction of road to northeast, 100 feet east of blacksmith shop; iron post stamped "265 B 1909 B 13"_____ 265.853

Oroville, 6.8 miles northwest of, 1 mile northwest of Wicks, south side of road at intersection of second-class road, in base of fence post; spike with aluminum tag stamped "264 B. M. 49"_____ 264.95

Dry Creek, 1.2 miles southeast of, south side of road, at junction of road to south, in base of fence post; spike with aluminum tag stamped "251 B. M. 50"_____ 252.26

Rio Seco School, north of, northwest corner of field, 500 feet east of Dry Creek, at intersection of Marysville-Oroville roads; iron post stamped "190 B 1909 B–10"_____ 190.544

Dry Creek, 1.4 miles northwest of, south side of road, at second-class road, in base of power pole 13–19; spike with aluminum tag stamped "223 B. M. 38"_____ 223.48

Butte Creek, 5.7 miles southeast of, east edge of road, in base of power pole 13–6; spike with aluminum tag stamped "184 B. M. 37" 184.40

Butte Creek, 4.6 miles southeast of, east of road, 100 feet south of bridge over drain, in base of power pole 12–3; spike with aluminum tag stamped "166 B. M. 36"_____ 166.60

	Feet
Durham, 4 miles east of, at intersection of Durham-Chico-Oroville roads, 10 feet west of signpost; iron post stamped "181 B 1909 B–3"	182.356
Butte Creek, 3 miles southeast of, east edge of road, opposite transforming station on power line, in base of power pole 1; spike with aluminum tag stamped "172 B. M. 35"	172.51
Butte Creek, 1.6 miles southeast of, north edge of road, at junction of Chico-Oroville-Paradise roads, in base of power pole 1–4; spike with aluminum tag stamped "172 B. M. 34"	172.81
Butte Creek, 1.2 miles southeast of, south edge of road, in base of power pole 1–10; spike with aluminum tag stamped "177 B. M. 19"	178.18
Butte Creek, 0.8 mile southeast of, north edge of road, 600 feet east of water trough, in base of 36-inch oak tree; spike with aluminum tag stamped "185 B. M. 18"	185.38
Butte Creek, 30 feet west of approach to bridge, north side of road, in base of power pole 2–18; spike with aluminum tag stamped "191 B. M. 17"	192.22
Carmino, 200 feet north of Northern Electric R. R. station, west edge of county road, 50 feet north of large gate, at junction of Chico-Oroville road; iron post stamped "191 B 1909 B 4"	192.017
Sterling Junction, 0.8 mile south of, seventh telephone pole south of mile-post 3, east side of right of way, in base of telephone pole; spike with aluminum tag stamped "203 B. M. 16."	203.67
From Oroville west along highway to Tres Vias, thence north to Rio Seco School	
Oroville, northeast corner of courthouse, 4.5 feet from ground, in concrete wall; aluminum tablet stamped "173 B 1909 B 1"	173.536
Oroville, 2.5 miles west of, at road crossing, reverse curve in Northern Electric R. R. track, in base of telegraph pole; spike with aluminum tag stamped "178 B. M. 16"	178.79
Oroville, 3.5 miles west of, at road crossing, northeast corner of right of way fence; iron post stamped "203 B 1909 B H"	204.225
Oroville, 5 miles west of, 1 mile east of Tres Vias, at trestle on Northern Electric R. R. and long fill in embankment, in base of power pole; spike with aluminum tag stamped "169 B. M. 15"	170.19
Oroville, 6 miles west of, 200 feet southwest of Northern Electric R. R. station at Tres Vias, northwest corner of Floral School yard; iron post stamped "160 B. M. 1909 B. G."	161.107
Oroville, 7 miles west of, 1 mile west of Northern Electric R. R. station at Tres Vias, north side of road, opposite private roadway to south, in base of power pole 1–0; spike with aluminum tag stamped "128 B. M. 14"	128.97
Shippee road, 1.2 miles south of Northern Electric R. R. station, southwest corner of barnyard, in base of power pole; spike with aluminum tag stamped "122 B. M. 43," at intersection of road to east	123.28
Shippee road, Northern Electric R. R. station, north edge of right of way, in base of power pole 19–10; spike with aluminum tag stamped "125 B. M. 42"	126.00
Rio Seco School, 0.6 mile west and 2 miles south of, west of road at T road east, opposite power pole 18–14; iron post stamped "136 B 1909 B 11"	137.274

Feet

Rio Seco School, 0.6 mile west by 1 mile south of, east edge of road, in base of power pole 17–10; spike with aluminum tag stamped "153 B. M. 41"---------- 154.09

Rio Seco School, 0.6 mile west of, northwest corner of bridge over creek, in cap; copper nail with aluminum tag stamped "162 B. M. 40"---------- 163.08

Rio Seco School, east end of gate to school yard, in base of gate post; spike with aluminum tag stamped "182 B. M. 39"---------- 183.23

Rio Seco School, 1.4 miles north of, northwest corner of field, 500 feet from Dry Creek, at intersection of Marysville and Oroville roads; iron post stamped "190 B 1909 B–10"---------- 190.544

CHICO QUADRANGLE, INCLUDING THE 7½′ QUADRANGLES SHOWN IN FIGURE 44

[Latitude 39° 30′–40°; longitude 121° 30′–122°]

BUTTE AND GLENN COUNTIES

Precise leveling by the U. S. Coast and Geodetic Survey in 1920

Southeast along Southern Pacific R. R.

Feet

Anita, a flag stop on the Southern Pacific R. R., at mileage 193.6, near the old milepost and 10 telegraph poles south of the present milepost 194; U. S. G. S. iron post stamped "156 B 1902" (U. S. C. & G. S. b. m. G–17)---------- 156.794

Nord, about 1 mile north of, on Southern Pacific R. R., at mileage 192.2, west of track, on south end of ballast-dock culvert 192–B; brass disk (U. S. C. & G. S. b. m. H–17)---------- 152.201

Nord, about 0.5 mile south of, on Southern Pacific R. R., at mileage 190.95, 500 feet north of milepost 191, west of track, in north concrete abutment of culvert 190–C; top of a square-headed iron bolt (S. P. R. R. b. m.) (U. S. C. & G. S. b. m. I–17)---------- 147.618

Nord, about 0.5 mile south of, on Southern Pacific R. R., halfway to the first telegraph pole south of old milepost; U. S. G. S. iron post stamped "145 B 1902" (U. S. C. & G. S. b. m. J–17)---------- 145.626

Gimbal, on Southern Pacific R. R., 250 feet north of signpost "Gimbal" west of track, in top face south abutment of concrete culvert 189–A; outlined square (U. S. C. & G. S. b. m. K–17)---------- 147.929

Chico, about 3.5 miles north of, on Southern Pacific R. R., halfway to first telegraph pole south of old milepost and 10 poles south of the present milepost 188; U. S. G. S. iron post stamped "156 B 1902" (U. S. C. & G. S. b m. L–17)---------- 156.443

Chico, about 2.25 miles north of, on Southern Pacific R. R., at mileage 186.4, in north basalt abutment of trestle 186–B over Sandy Gulch, near east edge; outlined square (U. S. C. & G. S. b. m. M–17)---------- 179.389

Chico, in northeast concrete pier of large Southern Pacific R. R. water tank diagonally across from depot and 80 feet west of track, about 3 feet above ground; brass disk (U. S. C. & G. S. b. m. N–17)---------- 189.632

Chico, in front face of Chico State Normal School, at southwest corner, 3 feet above ground; aluminum tablet stamped "201 B 1902" (U. S. C. & G. S. b. m. O–17)---------- 201.614

	Feet
Chico, on northwest corner of Third and Orient streets, at plant of Chico Light & Water Co., in top horizontal surface on West side of southwest concrete pier of that one of the two large steel water tanks nearest the corner; brass disk (U. S. C. & G. S. b. m. P–17)	201.699
Chico, at the southeast corner of Broadway and Fifth streets, in horizontal surface at top of inclined limestone balustrade on left side of main entrance to post-office building, about 4 feet above ground; brass disk (U. S. C. & G. S. b. m. Q–17)	199.324
Chico, about 3.75 miles south of, on Southern Pacific R. R., at mileage 180.4, near old milepost; U. S. G. S. iron post stamped "182 B 1902" (U. S. C. & G. S. b. m. R–17)	182.733
Durham, about 0.5 mile north of, on Southern Pacific R. R., at mileage 178.8, on highway bridge opposite culvert 178–C, in north end of concrete guard rail under iron railing, east of road and 1 foot above it; square cut (U. S. C. & G. S. b. m. S–17)	164.127
Durham, at entrance to Commercial Bank of Durham, which faces Southern Pacific R. R. track at a distance of 325 feet, about 1 foot above sidewalk, on top surface of concrete base supporting two south pillars; brass disk (U. S. C. & G. S. b. m. T–17)	156.889
Durham, about 0.5 mile south of, on Southern Pacific R. R., at mileage 177.7, east of track, near old milepost; U. S. G. S. iron post stamped "152 B 1902" (U. S. C. & G. S. b. m. U–17)	153.13[illegible]
Durham, about 3 miles south of, on Southern Pacific R. R., at mileage 175.2, in top face of south basalt abutment of trestle over Butte Creek, near east edge; outlined square (U. S. C. & G. S. b. m. V–17)	140.846
Nelson, about 1.5 miles north of, on Southern Pacific R. R., at mileage 173.05, 100 feet west of culvert 173–A, on east guard rail at south end of a highway bridge, about 1 foot above road; brass disk (U. S. C. & G. S. b. m. W–17)	127.040
Nelson, 700 feet north of Southern Pacific R. R. depot, east of track, near old milepost; U. S. G. S. iron post stamped "120 B 1902" (U. S. C. & G. S. b. m. X–17)	120.636
Richvale, about 1.5 miles north of, on Southern Pacific R. R., at mileage 168.6, near tenth telegraph pole south of milepost 169; U. S. G. S. iron post stamped "170 B 1902" U. S. C. & G. S. b. m. Y–17)	108.458
Richvale, about 1.75 miles south of, on Southern Pacific R. R., at mileage 165.6, east of track, near tenth telegraph pole south of milepost 166; U. S. G. S. iron post stamped "99 B 1902" (U. S. C. & G. S. b. m. Z–17)	99.806

Precise leveling by C. H. Semper in 1902–3

Northwest along Southern Pacific R. R

Biggs, 7.1 miles north of, on east side of railroad, 5 feet north of old milepost 170; iron post stamped "107 B 1902" (C. & G. S. b. m. Y–17)	108.458
Nelson, in front of station; top of rail	121.9
Nelson, 700 feet north of station, on east side of railroad, 5 feet north of old milepost 173; iron post stamped "120 B 1902" (C. & G. S. b. m. X–17)	120.636
Nelson, 3.1 miles north of, on east side of railroad, 4 feet north of old milepost 176; iron post stamped "128 B 1902"	128.810

	Feet
Durham, 0.4 mile south of, on east side of railroad, 270 feet north of old milepost 179, 5 feet from telephone pole; iron post stamped "152 B. 1902" (C. & G. S. b. m. U–17)	153.136
Durham, in front of station; top of rail	159.9
Durham, 2.5 miles north of, on east side of railroad, 5 feet north of old milepost 182; iron post stamped "182 B 1902" (C. & G. S. b. m. R–17)	182.733
Chico, 0.5 mile south of, on east side of railroad, 5 feet north of old milepost 185; iron post stamped "185 B 1902"	185.682
Chico, in front of station; top of rail	189.5
Chico, State Normal School, southwest corner of building, front face; aluminum tablet stamped "201 B 1902" (C. & G. S. b. m. O–17)	201.614
Chico, 3.4 miles north of, on east side of railroad, 5 feet north of old milepost 189; iron post stamped "156 B 1902' (C. &. G. S. b. m. L–17)	156.443
Chico, 6.4 miles north of, on east side of railroad, 5 feet north of old milepost 192; iron post stamped "145 B 1902" (C. & G. S. b. m. J–17)	145.626
Nord, in front of station; top of rail	149.1
Nord, 2.3 miles north of, on east side of railroad, 5 feet north of old milepost 195; iron post stamped "156 B 1902" (C. & G. S. b. m. G–17)	156.794

Primary leveling by L. F. Biggs and W. H. Barringer in 1909

From Durham east along highway to Oroville-Chico road

Durham, at Southern Pacific R. R. crossing; top of rail	161.5
Durham, 0.8 mile east of, southeast corner of bridge over Butte Creek, in floor; copper nail with aluminum tag stamped "167 B. M. 11"	167.57
Durham, 1.8 miles east of, north edge of road, 300 feet east of bridge over drain, 1 mile east of Butte Creek, in base of 20-inch oak tree; spike with aluminum tag stamped "155 B. M. 12"	156.09
Durham, 2.9 miles east of, south side of bridge over dry creek, in floor; spike, painted "161 B. M. 13"	162.17
Durham, 4 miles east of, at junction of Durham-Oroville-Chico roads, 10 feet west of signpost; iron post stamped "181 B 1909 B. 3"	182.356

From point 7.4 miles west of Biggs north along highway to Nelson (portion of line)

Landlow School, 2 miles west by 6.8 miles north of, east side of north abutment of concrete culvert over small creek; aluminum tablet stamped "93 B 1909 B. C."	92.971
Landlow School, 2 miles west by 7.3 miles north of, county wagon bridge over Butte Creek, north end, in floor; copper brad with aluminum tag stamped "100 B. M. 6"	100.63
Landlow School, 2 miles west by 8.4 miles north of, 5.3 miles west of Nelson, 1 mile west of county bridge on Oroville road over Butte Creek, at turn in Oroville road and power line; iron post stamped "100 B. 1909 B. D."	100.787
Nelson, 4.3 miles west of, county bridge over Butte Creek on Oroville road, in stringer over southwest pier; painted bolt with aluminum tag stamped "111 B. M. 7"	111.81

	Feet
Nelson, 3.3 miles west of, northeast corner of field, opposite Chinese ranch house, in base of fence post; spike with aluminum tag stamped "105 B. M. 8"	105.20
Nelson, 2.1 miles west of, northwest corner of field, opposite private road to ranch house, south side of Oroville road; iron post stamped "108 B 1909 B. E."	108.647
Nelson, 1.1 miles west of, in front of ranch house, on north side of road, in base of telephone pole; spike with aluminum tag stamped "112 B. M. 9"	112.34
Nelson, 700 feet north of station, on east side of railroad, 5 feet north of milepost 173; iron post stamped "120 B 1902"	120.636

From Chico west along highway to St. John

Chico, State normal school, southwest corner of building, front face; aluminum tablet stamped "201 B 1902" (C. & G. S. B. M. O–17)	201.614
Chico, west end of town, south side of road, at junction of river road and road to south, in base of telephone pole; spike with aluminum tag stamped "177 B. M. 20"	177.88
Chico, 0.7 mile west of, where road bends to south, 15 feet south of gate to Morehead ranch, in base of telephone pole; spike with aluminum tag stamped "174 B. M. 21"	175.11
Chico, 1.2 miles west of, south side of road, at junction of road to south, in base of telephone pole; spike with aluminum tag stamped "166 B. M. 22"	166.58
Chico, 2 miles west of, south edge of road, 800 feet west of water tank, 60 feet east of oak tree; iron post stamped "154 B 1909 B–5"	154.693
Chico, 2.8 miles west of, north edge of road, opposite river-road schoolhouse, in base of 40-inch oak tree blazed on south side; copper nail with aluminum tag stamped "143 B. M. 23"	143.47
Chico, 4 miles west of, 1.2 miles west of river-road schoolhouse, south side of road, 100 feet west of cross-fence line, in base of telephone pole; spike with aluminum tag stamped "131 B. M. 24"	131.84
Chico, 4.4 miles west of, 1.5 miles west of river-road schoolhouse, where road bends northwest, north end of gate to second-class road through Phelan ranch, in base of telephone pole; spike with aluminum tag stamped "129 B. M. 25"	129.83
Chico Landing, 0.6 mile south of, northwest corner of bridge over slough, in cap; spike with aluminum tag stamped "136 B. M. 26"	135.22
Chico Landing, east edge of road, 30 feet north of lane to house, opposite boat landing, 3 feet from signpost; iron post stamped "132 B 1909 B. 6"	132.980
Chico Landing, 0.8 mile west of, north edge of Northern Electric R. R. right of way, 150 feet east of end of trestle, in base of 30-inch oak tree; spike with aluminum tag stamped "130 B. M. 27"	130.34
Seco station, Northern Electric R. R., southwest corner of cattle guard; copper nail with aluminum tag stamped "140 B. M. 28"	139.51
St. John, Northern Electric R. R. station, at road crossing; top of rail	140.3
St. John, 300 feet south of Stony Creek, 40 feet northeast of intersection of crossroads, in southwest corner of school yard; iron post stamped "143 B"	143.796

From point 4.4 miles west of Chico south to Parrott school district (portion of line)

	Feet
Chico, 4.4 miles west of, 1.5 miles west of river-road schoolhouse, where road turns northwest, at north end of gate to second-class road through Phelan ranch; in base of telephone pole; spike with aluminum tag stamped "129 B. M. 25"	129.83
Chico Landing, 2 miles southwest of, east edge of road, end of field gate, in base of 24-inch oak tree; spike with aluminum tag stamped "120 B. M. 29"	120.56
Phelan hog ranch, 5 feet west of field gate, west edge of second-class road, 3.2 miles south of Chico Landing; iron post stamped "123 B 1909 B. 7"	124.208
Phelan hog ranch, 0.7 mile south of, south end of field, east bank of creek, at field gate, in base of 24-inch oak tree; spike with aluminum tag stamped "120 B. M. 30"	120.62
Parrott School, 0.6 mile north of, 0.8 mile south of large brick house, east side of road, at fence corner, in base of 24-inch oak tree; spike with aluminum tag stamped "117 B. M. 31"	118.31
Parrott School, southwest corner of school yard, at intersection of second-class road; iron post stamped "112 B 1909 B 8"	112.833
Parrott School, 1.3 miles south of, 250 feet northeast of house, on Parrott ranch, 15 feet west of road, in base of 24-inch oak tree; spike with aluminum tag stamped "106 B. M. 71"	107.08
Parrott School, 2.4 miles south of, 200 feet south of large gate, west edge of road, in base of 24-inch oak tree; spike with aluminum tag stamped "101 B. M. 72"	101.58
Parrott School, 3.6 miles south of, at Parrott triangulation station, 20 feet north of road, 100 feet west of large new barn; iron post stamped "109 B 1909 B 19"	109.705
Parrott triangulation station, 1.8 miles south of, southwest corner of yard of white house, in base of fence post; spike with aluminum tag stamped "102 B. M. 73"	102.86
Butte City, 3 miles east by 5 miles north of, where road turns east, 15 feet east of fence corner; iron post stamped "102 B 1909 B 20"	103.086
Butte City, 3 miles east by 4 miles north of, opposite junction of T road to west, in base of telephone pole; spike with aluminum tag stamped "95 B. M. 74"	96.14

From Parrott School northeast to Dayton, thence north to Chico

Dayton, 3.1 miles west of, 100 feet east of slough, south side of road, in base of telephone pole; spike with aluminum tag stamped "110 B. M. 32"	109.44
Dayton, 2.8 miles west of, south side of road, opposite large barn, 0.5 mile west of Butte City road, in base of 36-inch oak tree; spike with aluminum tag stamped "116 B. M. 33"	116.44
Dayton, 2.2 miles west of, south side of road, northeast corner of field, at intersection of Butte City-Dayton roads; iron post stamped "119 B 1909 B. 9"	119.832
Dayton, 0.7 mile southwest of, where road jogs to south and west, east end of gate to ranch, in base of 40-inch oak tree; spike with aluminum tag stamped "131 B. M. 6"	131.93

	Feet
Dayton, west end of town, 100 feet west of large gate to lane, south side of road, in base of telephone pole; spike with aluminum tag stamped "137 B. M. 5"	137.58
Dayton, 1 mile east of, southeast corner of field, at crossroads, in base of telephone pole; spike with aluminum tag stamped "141 B. M. 4"	141.92
Chico, 3.7 miles southwest of, north edge of road, at bend in road, in base of telephone pole 1699; spike with aluminum tag stamped "143 B. M. 3"	144.10
Chico, 2.7 miles southwest of, east edge of road, southwest corner of field, at intersection of road to Durham; iron post stamped "155 B 1909 B. 1"	155.786
Chico, 1.9 miles southwest of, north edge of road, 400 feet east of large barn, in base of telephone pole; spike with aluminum tag stamped "165 B. M. 2"	166.07
Chico, 0.9 mile southwest of, north side of road, opposite T road east, south of gate to field, in base of telephone pole; spike with aluminum tag stamped "174 B. M. 1"	175.021
Chico, 0.5 mile south of, on east side of railroad, 5 feet north of milepost 5; iron post stamped "185 B 1902"	185.682

From Dayton east to Durham

Dayton, 1 mile east of, northwest corner of field at crossroads, iron post stamped "142 B 1909 B 2"	143.041
Durham, 3 miles west of, east side of T road to south, north end of gate, in base of fence post; spike with aluminum tag stamped "150 B. M. 7"	150.65
Durham, 2 miles west of, south side of road, at T road north, 50 feet west of cross fence, in base of fence post; spike with aluminum tag stamped "156 B. M. 8"	157.18
Durham, 1.4 miles west of, east side of road, at intersection of north and south road, in base of 36-inch oak tree; spike with aluminum tag stamped "157 B. M. 9" (moved and lowered several feet, elevation uncertain)	158.02
Durham, 0.9 mile west of, at intersection of road, southwest corner of field, in base of telephone pole; spike with aluminum tag stamped "155 B. M. 10"	155.69
Durham, in front of station; top of rail	159.9
Durham, 0.4 mile south of, east of railroad, 270 feet north of milepost 179, 5 feet from telephone pole; iron post stamped "152 B 1902"	153.136

From Sterling Junction northwest to Chico

Sterling Junction, east edge of road, north edge of railroad right of way, at road crossing, in base of oak tree; spike with aluminum tag stamped "201 B. M. 15"	202.07
Barber, 1 mile east of, southeast corner of trestle over creek; painted bolthead with aluminum tag stamped "200 B. M. 14"	201.25

GILSIZER SLOUGH, OSTROM, SUTTER, AND YUBA CITY QUADRANGLES

[Latitude 39°–39° 15′; longitude 121° 30′–121° 45′]

SUTTER AND YUBA COUNTIES

Primary leveling by L. F. Biggs and W. H. Monahan in 1908 and by L. F. Biggs in 1909

From Marysville north along Southern Pacific R. R. and east along road to Sevenmile House

	Feet
Marysville, 225 feet west of track, at southeast corner of railroad park; iron post stamped "61–B 1902"	61.782
Marysville, 2.5 miles north of, east of railroad, at fence line, 5 feet north of milepost 145; iron post stamped "65–1"	65.980
Marysville, 5.7 miles north of, 50 feet east of railroad, at fence corner, 800 feet north of milepost 148; iron post stamped "73–2"	72.476
Sevenmile House, 3 miles west of, at northeast corner of bridge over Nigger Jack Slough; top of painted bolt with aluminum tag stamped "75 5"	75.01
Sevenmile House, 2.3 miles west of, northeast corner of granite milepost; notch marked "80 6"	80.03
Sevenmile House, 1 mile west of, east of road, 50 feet north of junction, 5 feet west of power pole; iron post stamped "90 3"	90.304

From point 1.2 miles southwest of Brophy School west to Marysville

Brophy School, 1.2 miles southwest of, south of road, north of fence, opposite house on small rise; iron post stamped "84 21"	84.395
Marysville, 3.7 miles east of, north of road, 5 feet north of fence line, 1,000 feet northwest of house on mound; iron post stamped on rim "74.8" (United States Army, Corps of Engineers[1] b. m, their elevation 74.8 feet)	70.816
Marysville, 3.2 miles east of, north of road, at fence line, opposite house; iron post stamped on rim "U. S. E. D. 75" (United States Army, Corps of Engineers b. m. 73, their elevation 75 feet)	70.903

From Marysville southeast toward Earle

Marysville, 2.5 miles southeast of, at northwest corner of cross-roads; iron post stamped "68 Cal 1908"	69.070
Marysville, 4.3 miles southeast of, on tiling at northwest corner of T road; chiseled square; aluminum tag stamped "65"	65.96

From Marysville along Southern Pacific R. R. to Ostrom

Marysville, 2.7 miles south of, 50 feet east of milepost 139, at fence, east of track; iron post stamped "61 B 1908 A. B."	61.819
Marysville, 5.7 miles south of, east of track, 40 feet east of milepost 136, at fence; iron post stamped "56 B 1908 B. B."	57.115

From point near Plumas School west to Marysville road, thence south

Bear River bridge, 3.7 miles north of, east of road, at intersection of road, 250 feet east of old house; iron post stamped "49 B 1908 B. C. 2"	49.302
Bear River bridge, 2.4 miles north of, southeast corner of bridge over small creek; top of painted bolthead and aluminum tag stamped "46 186"	46.51

[1] Locally known as U. S. Engineer Department.

From Marysville south along road via Howard station to forks of road 2.5 miles north of Bear River bridge

	Feet
Howard, 1 mile south of station, 60 feet east of Northern Electric R. R. right of way, at bend of road, in fence corner; iron post stamped "53 B 1908 B. D. 2"	54.109

From Yuba City west and south to point 4 miles west by 2 miles north of Marcuse

Marysville, 0.9 mile south of station, west of railroad, at fence line, 5 feet north of milepost 121; iron post stamped "58 B 1902"	58.292
Yuba City, 3.4 miles southwest of, in southeast corner of Lincoln School yard; iron post stamped "52"	52.583
Grant School, at northwest corner of yard, at crossroads; iron post stamped "299 1908 41 Prim. Trav. Sta."	41.876
Grant School, 3.6 miles south of, in southwest corner of bridge over pond; top of bolt with aluminum tag stamped "36"	36.60
Grant School, 4.8 miles south of, west of road, 150 feet north of Christopherson's ranch house; iron post stamped "35 Cal 1908"	35.961

From point 2 miles south by 0.5 mile east of Sutter City east along road to fork of roads 2.2 miles southwest of Yuba City

Sutter City, 2 miles south by 0.5 mile east of, in east corner of junction of T roads; iron post stamped "44 Cal 1908"	44.236
Sutter City, 2 miles south by 2.2 miles east of, in culvert over road; spike with aluminum tag stamped "46"	46.72
Sutter City, 2 miles south by 3.5 miles east of, in southwest corner of school yard; iron post stamped "50 Cal 1908"	50.751
Sutter City, 2 miles south by 4.5 miles east of, north of road, in front of small cottage, in base of tree; spike with aluminum tag stamped "51"	51.07

From Grant School west and north toward Sutter City

Grant School, 2.5 miles west of, west of road at fork of road from north; iron post stamped "Prim. Trav. Sta. 36 Cal 321 1908"	36.667

From point 5.7 miles northeast of Marysville along road west and north to point 2.6 miles north of Wooddrift School

Wooddrift School, 0.4 mile west of, 60 feet northwest of junction of Marysville road, at fence corner; iron post stamped "69 B 1909 B. A."	69.502
Wooddrift School, 0.4 mile west by 1 mile north of, center of road, in base of 36-inch oak tree; spike with aluminum tag stamped "72 B. M. 3"	72.41
Wooddrift School, 2 miles north of, 300 feet south of section line, west side of road, in base of 40-inch live-oak tree; spike with aluminum tag stamped "75 B. M. 4"	75.38

From point 7.1 miles northeast of Marysville northeast 10 miles, thence west to Honcut (portion of line)

Nigger Jack Slough, 3.2 miles north of, southwest corner of intersection of east-west road; iron post stamped "95 B 1909 B. T."	95.209

From Yuba City west along county road to Sutter City

Yuba City, 3.8 miles west of, at section line, north edge of road, west edge of ditch, 30 feet north of bridge; iron post stamped "53 B 1909 B. K."	53.431

From Sutter City north, east, and north along county road 7 miles

	Feet
Sutter City, 1 mile north by 1 mile east of, at section line, west end of large gate to second-class road, in base of gatepost; spike with aluminum tag stamped "56 B. M. 40"	56.54
Sutter City, 1 mile north by 2 miles east of, north side of road, southeast corner of eucalyptus grove, at intersection of road to north; iron post stamped "53 B 1909 B. L."	54.094
Sutter City, 2 miles east by 2 miles north of, west edge of road, in base of 40-inch oak tree; spike with aluminum tag stamped "57 B. M. 41"	57.87
Sutter City, 2 miles west by 3.1 miles north of, 0.3 mile south of Union School, west edge of road, 200 feet north of dry creek, in base of 20-inch oak tree; spike with aluminum tag stamped "62 B. M. 42"	63.30
Union School, northeast corner of school yard; iron post stamped "66 B 1909 B. M."	66.455

GRIMES, MARYSVILLE BUTTES, MERIDIAN, AND TISDALE WEIR QUADRANGLES

[Latitude 39°–39° 15′; longitude 121° 45′–122°]

SUTTER AND COLUSA COUNTIES

Primary leveling by C. H. Semper and E. M. Fry in 1904, by W. H. Monahan in 1908, and by W. H. Barringer in 1909

From Colusa southeast to Sycamore

	Feet
Sycamore, at east edge of highway, opposite saloon, between locust trees; iron post stamped "48 B"	48.729

From forks of road 2.7 miles south of Sycamore south and west to Arbuckle

Grimes, on north line of Main St., 10.8 feet from northwest corner of Main and Second streets; iron post stamped "47 B" (moved)	46.910
Sam Hines's ranch, in northwest angle of roads; iron post stamped "32 B"	32.708
Sam Hines's ranch, 2.6 miles west of, 145 feet west of levee, south of road; iron post stamped "26 B"	26.532
College City, 1.5 miles north and east of, 1,100 feet west of bridge over slough, at southeast angle of road to south; iron post stamped "36 B"	36.424

From point 3.6 miles north of Salem School northwest via Eddys Ferry to Meridian

Eddys Ferry, 4.5 miles southeast of, at west corner where road turns at an angle of 90 degrees to right; iron post stamped "Prim. Trav. Sta. No. 215 Cal 1908 41"	41.689
Eddys Ferry, 1 mile north of, on top of levee, in dredge cut, 500 feet west of road and 300 feet north of residence of Gerdine's dairy, first house on left side of road from Eddys Ferry; iron post stamped "Prim. Trav. Sta. No. 222 Cal 1908 47"	47.154
Eddys Ferry, 3.4 miles northwest of, in front of large red brick house, in base of fig tree; spike with aluminum tag stamped "49"	49.53
Meridian, 2.2 miles south of, at base of levee, west side of road, 150 feet south of C. D. Crookan's house; iron post stamped "Prim. Trav. Sta. No. 227 Cal 1908 51"	51.317

	Feet
Meridian, at northeast corner of G. W. Wood's yard, intersection of county road to Colusa and ferry road; iron post stamped "Prim. Trav. Sta. No. 260 Cal 1908 51"	51.891
From Meridian east to vicinity of Sutter City	
Meridian, 3.5 miles east of, in base of levee on Butte Slough, north of road, in angle opposite first house from Slough School; iron post stamped "Prim. Trav. Sta. No. 265 Cal 1908 45"	45.664
Sutter City, on southeast corner of Colusa and Acacia streets, at the corner of Clement's barnyard; iron post stamped "Prim. Trav. Sta. No. 277 Cal 1908 67"	67.794
From point 2 miles southwest of Duckhunter clubhouse southwest to river road 3.7 miles southeast of Eddys Ferry	
Grant School, 2.5 miles west of, thence 3.5 miles southwest of, south of road, in tule swamp, 300 feet northeast of small lake; iron post stamped "30 1908 Cal"	30.254
From point 3.5 miles east of Meridian northwest and east along highway to Pennington	
West Butte, 3.1 miles southeast of, lower side of road, on boulder; chisel point, painted "48 U.S.B.M. 61"	48.35
West Butte, 0.5 mile east by 1.5 miles south of, in front of Tarke's ranch (white house), east side of road, in boulder; aluminum tablet stamped "54 B 1909 B.V."	54.291
West Butte, 2.2 miles north of, north side of road, 800 feet east of shacks on hillside above road, 15 feet north of center of roadway, in boulder; aluminum tablet stamped "67 B 1909 B.W."	67.897
Noyesburg, 1.4 miles north by 0.3 mile east of schoolhouse, east side of road, 100 feet south of white house, on top of small knoll, 5 feet west of east fence line along road, in large boulder; aluminum tablet stamped "71 B 1909 B.X."	71.790
From Colusa south along highway to Meridian	
Colusa, Colusa County courthouse, 2 miles southeast of, east side of road, in base of 4-inch sycamore tree; copper brad with aluminum tag stamped "59 B.M. 52"	59.42
Colusa, 5 miles southeast of, east side of levee road, 0.25 mile southeast of farmhouse, 2 miles northwest of Kent, 2 feet north of telephone pole painted "U.S.B.M."; iron post stamped "58 B 1909 B.T."	58.936
Meridian, 4 miles northeast of, 0.3 mile south of Kent, east side of road, in front of brown house and 100 feet north of entrance to yard; iron post stamped "54 B 1909 B.N."	55.271
Meridian, 3.1 miles north of, 1.2 miles south of Kent, east side of road, in front of white house, in base of large fig tree; spike with aluminum tag stamped "54 B.M. 57"	55.13
From Union School south along highway to Colusa (portion of line)	
Colusa, north wall of Colusa County courthouse, 15 feet west of main entrance: aluminum tablet stamped "60 B 1904"	60.975

KEEFERS AND NORD 7½′ QUADRANGLES

[Latitude 39° 45′–39° 52′ 30″; longitude 121° 45′–122°]

BUTTE COUNTY

Primary leveling by L. F. Biggs in 1909

From Chico northwest along highway to Vina

	Feet
Chico, 1.7 miles north of normal school, northwest corner of bridge over Big Chico Creek; painted bolthead with aluminum tag stamped "194 B. M. 51"	195.14
Big Chico Creek, 0.7 mile northeast of, north edge of road, at turn north, in base of telephone pole; spike with aluminum tag stamped "205 B. M. 52"	204.54
Chico, 3.3 miles northeast of, west edge of road, at lane to ranch, in base of fence post; spike with aluminum tag stamped "202 B. M. 53"	202.47
Chico, 3.8 miles northeast of, west edge of road, at junction of road to west, in base of fence post; spike with aluminum tag stamped "193 B. M. 54"	194.28
Chico, 4.6 miles northeast of, northwest corner of bridge over Mud Creek, in cap; copper nail with aluminum tag stamped "194 B. M. 55"	194.84
Chico, 5.3 miles northeast of, east edge of road, at junction of road to east, where road jogs northwest, 50 feet south of gate to second-class road; iron post stamped "249 B 1909 B. 14"	249.407
Chico, 6.5 miles northeast of, 350 feet south of road to east, at cross-fence line, on summit of ridge, in base of fence post; spike with aluminum tag stamped "293 B. M. 56"	293.44
Chico, 7.2 miles northeast of, east of road, 20 feet south of intersection of road to Richardson's Spring, in base of 20-inch live-oak tree; spike with aluminum tag stamped "308 B. M. 57"	308.94
Junction of Chico and Richardson's Spring roads, 1 mile west of, at east end of gate to second-class road, in base of fence post; spike with aluminum tag stamped "304 B. M. 58"	304.90
Junction of Chico and Richardson's Spring roads, 2 miles west of, north of road, oposite east end of orchard at gate to second-class road, in base of 24-inch oak tree; spike with aluminum tag stamped "233 B. M. 59"	233.60
Chico, 6 miles north of, in sec. 28, T. 23 N., R. 1 W., at T road along south bank of Rock Creek, opposite southeast corner of peach orchard, iron post stamped "227 B 1909 B. 15"	228.052
Shannon ranch, opposite house, north edge of road, in base of 24-inch locust tree; spike with aluminum tag stamped "198 B. M. 60"	199.93
Shannon ranch, 1.2 miles west of, 50 feet north of intersection of Chico-Vina-Cohasset roads, 0.5 mile south of Rock Creek Bridge, in base of power pole; spike with aluminum tag stamped "177 B. M. 61"	178.18
Rock Creek, northwest corner of bridge, in cap; copper nail with aluminum tag stamped "183 B. M. 62"	183.89
Rock Creek Bridge, 1 mile northeast of, 2.5 miles south of Antelope School, west edge of road, at second-class road through Shannon ranch; iron post stamped "195 B 1909 B. 16"	195.891

	Feet
Antelope School, 1.5 miles south of, west edge of road, at cross-fence line, in base of fence post; spike with aluminum tag stamped "219 B. M. 63"	219.71
Antelope School, 50 feet south of southwest corner of school yard, in base of fence post; spike with aluminum tag stamped "261 B. M. 64"	261.56
Antelope School, 1 mile north of, west edge of road, southeast corner of field, on county line, in base of fence post; spike with aluminum tag stamped "285 B. M. 65"	285.95
Pine Creek, southwest corner of bridge, in cap; copper nail with aluminum tag stamped "293 B. M. 66"	293.84
Live Oak School, 0.6 mile north by 0.6 mile west of, 2.6 miles east of triangulation station at Stanford sheep ranch headquarters, south edge of road, where road turns west, in boulder buried flush with ground; aluminum tablet stamped "283 B 1909 B. 17"	283.868
Stanford sheep ranch headquarters, 1.6 miles east of, south edge of road, at fence corner, in base of fence post; spike with aluminum tag stamped "227 B. M. 67"	227.96
Stanford sheep ranch headquarters, 1 mile east of, north edge of road, in base of fence post; spike with aluminum tag stamped "229 B. M. 68"	229.45
Stanford sheep ranch headquarters, 250 feet southwest of house, 5 feet north of tree, triangulation station; iron post stamped "238 B 1909 B 18"	238.835
Stanford sheep ranch headquarters, 0.8 mile north of, west edge of irrigation ditch, in base of 10-inch willow tree; spike with aluminum tag stamped "258 B. M. 68"	258.70
Stanford sheep ranch headquarters, 1.4 miles north of, 4.4 miles east of Vina, at intersection of east-west road, north end of gate, in gate post; spike with aluminum tag stamped "280 B. M. 69"	280.78
Stanford sheep ranch headquarters, 2.6 miles north of, 3.4 miles east of Vina, opposite house, north side of road, at intersection of north-south road, in base of fence post; spike with aluminum tag stamped "262 B. M. 70"	262.80
Vina, 0.4 mile south of, on east side of railroad, 30 feet north of milepost 204; iron post stamped "202 B 1902"	203.056

MARYSVILLE QUADRANGLE, INCLUDING THE 7½′ QUADRANGLES SHOWN IN FIGURE 44

[Latitude 39°–39° 30′; longitude 121° 30′–122°]

BUTTE, COLUSA, SUTTER, AND YUBA COUNTIES

Precise leveling by the U. S. Coast and Geodetic Survey in 1920

South along Southern Pacific R. R.

	Feet
Biggs, about 1.75 miles north of, on Southern Pacific R. R., 20 feet west of and 2 feet below track, on top face of west head wall of concrete culvert 163–A over an irrigation canal; brass disk (U. S. C. & G. S. b. m. A–18)	96.207
Biggs, 260 feet west of Southern Pacific R. R. track, on southeast one of four concrete piers of fire-bell tower, south of City Light and Water Works; brass disk (U. S. C. & G. S. b. m. B–18)	93.940

	Feet
Gridley, about 1.75 miles north of, on Southern Pacific R. R., at mileage 159.7, east of track at fence line; U. S. G. S. iron post stamped "90 B 1902" (U. S. C. & G. S. b m. C–18)	91.033
Gridley, west of Southern Pacific R. R. depot, 35 feet south of northeast corner of city park, 3 feet west of a retaining wall, west of and 1 foot below track; concrete post with disk in top (U. S. C. & G. S. b. m. D–18)	91.233
Live Oak, about 5 miles north of, 1.5 miles south of Gridley on Southern Pacific R. R., at mileage 156.5, east of track at a road crossing; U. S. G. S. iron post stamped "92 B 1902" (U. S. C. & G. S. b. m. E–18)	93.294
Live Oak, about 2.25 miles north of, on Southern Pacific R. R., opposite culvert 153–C, at southwest corner of State highway culvert over irrigation canal, on upper horizontal surface of sidewalk, about 3 feet above road; a brass disk (U. S. C. & G. S. b. m. F–18)	85.072
Live Oak, 260 feet north of first road crossing north of Southern Pacific R. R. depot, at north end of "house track" switch, 35 feet east of and 3 feet below track, 10 feet from a telegraph pole; concrete post with disk in top (U. S. C. & G. S. b. m. G–18)	74.908
Sunset, about 0.75 mile south of, on Southern Pacific R. R., opposite culvert 149–A, at northwest corner of State highway culvert over irrigation canal, on upper horizontal surface of sidewalk, about 3 feet above highway; a brass disk (U. S. C. & G. S. b. m. H–18)	76.299
Marysville, about 5.75 miles north of, 3.25 miles south of Sunset on Southern Pacific R. R., at mileage 146.5, east of track, at fence line near an old milepost; U. S. G. S. iron post stamped "66 B 1902" (U. S. C. & G. S. b. m. I–18)	67.080
Berg, about 0.75 mile south of, 3 miles north of Marysville on Southern Pacific R. R., at crossing over west levee of Feather River, 3 feet inside right of way fence and at a turn in it, about 115 feet west of and 15 feet below track; concrete post with disk in top (U. S. C. & G. S. b. m. J–18)	63.586
Marysville, at southeast corner of Southern Pacific R. R. park at depot, 225 feet west of track; U. S. G. S. iron post stamped "61 B. 1902" (U. S. C. & G. S. b. m. K–18)	61.801
Marysville, at north end of D St. concrete bridge over Yuba River, in vertical face at end of west side railing, under a lamp post and 1 foot above sidewalk; brass disk (U. S. C. & G. S. b. m. L–18)	76.493
Marysville, about 1.75 miles south of, on Southern Pacific R. R., 215 feet west of track at a road crossing, in southeast quarter of intersection of road with State highway, 13 feet east of fence post at corner of crossroads, 50 feet east of State highway; concrete post with disk in top (U. S. C. & G. S. b. m. M–18)	63.018
Marysville, about 3.75 miles south of, on Southern Pacific R. R., at mileage 137.1, on southeast corner of concrete highway culvert opposite culvert 137–A, 100 feet west of and 5 feet below track; brass disk (U. S. C. & G. S. b m. N–18)	64.055
Ostrom, about 1 mile north of, on Southern Pacific R. R., at mileage 135.2, on highway bridge opposite culvert 135–B, 100 feet west of track; brass disk (U. S. C. & G. S. b. m. O–18)	57.979

	Feet
Ostrom, about 0.5 mile south of, on Southern Pacific R. R., at mileage 133.6, opposite culvert 133–D and 65 feet west of track, on northeast corner of a concrete highway culvert; iron bolt (U. S. C. & G. S. b. m P–18)	61.919

Precise leveling by C. H. Semper in 1902–3

North along Southern Pacific R. R.

Tudor, in front of station; top of rail	40.4
Tudor, 2.8 miles north of, on west side of railroad, at fence line, 5 feet north of old milepost 115; iron post stamped "43 B 1902"	43.981
Tudor, 5.8 miles north of, on west side of railroad, at fence line, 5 feet north of old milepost 118; iron post stamped "53 B 1902"	53.623
Tudor, 8.8 miles north of, on west side of railroad, at fence line, 5 feet north of old milepost 121; iron post stamped "58 B 1902"	58.262
Yuba City, in front of station; top of rail	58.0
Marysville, at railroad station, 225 feet west of track, at southeast corner of railroad park; iron post stamped "61 B 1902" (U. S. C. & G. S. b. m. K–8)	61.801
Marysville, 2.8 miles north of, on east side of railroad, 300 feet north of long trestle, 10 feet east of track, opposite old milepost 145; iron post stamped "72 B 1902"	72.374
Marysville, 5.7 miles north of, on east side of railroad, 4 feet north of old milepost 148, at fence line; iron post stamped "66 B 1902" (C. S. I–18)	67.080
Marysville, 8.7 miles north of, on east side of railroad, at fence line, 4 feet north of old milepost 151; iron post stamped "73 B 1902"	74.220
Live Oak, in front of station; top of rail	76.5
Live Oak, 2 miles north of, on east side of railroad, 5 feet north of old milepost 155; iron post stamped "82 B 1902"	82.573
Live Oak, 5 miles north of, on east side of railroad, at road crossing, 30 feet south of old milepost 158; iron post stamped "92 B 1902" (C. S. E–18)	93.294
Gridley, in front of station; top of rail	93.5
Gridley, 1.7 miles north of, on east side of railroad, 480 feet north of old milepost 161, at fence line; iron post stamped "90 B 1902" (C. S. C–18)	91.033
Biggs, in front of station; top of rail	94.5
Biggs, 1.3 miles north of, on west side of railroad, 900 feet north of old milepost 164, 50 feet west of track, at telegraph pole; iron post stamped "91"	91.639
Biggs, 4.2 miles north of, on east side of railroad, 5 feet north of old milepost 167; iron post stamped "99 B 1902" (C. & G. S. b. m. Z–17)	99.806

PRAIRIE CREEK QUADRANGLE

[Latitude 39° 15′–39° 22′ 30″; longitude 121° 22′ 30″–121° 30′]

BUTTE AND YUBA COUNTIES

Primary leveling by L. F. Biggs in 1909

From point 7.1 miles northeast of Marysville northeast 10 miles, thence west to Honcut (portion of line)

	Feet
Honcut, 4 miles southeast of, south end of large gate, at second-class road to Honcut, 150 feet north of house, west edge of road; iron post stamped "119 B 1909 B. U"	119.419

	Feet
Honcut Creek, 1 mile southwest of, 10 feet east of road, 1,000 feet south of Bryden ranch house, on 3 by 2 foot boulder; chisel point painted "158 B. M. 69"	158.35
Honcut Creek, 0.7 mile south of, 0.5 mile north of Bryden ranch, at junction of road to east, west side of road, in base of 24-inch oak tree; spike with aluminum tag stamped "208 B. M. 72"	208.66
Honcut, 4.5 miles northeast of, Honcut Creek bridge, northeast pier; aluminum tablet stamped "168 B 1908 B. W"	168.948
Honcut, 4.3 miles northeast of, 0.2 mile west of Honcut Creek, at intersection of north-south road, in base of stump; spike with aluminum tag stamped "194 B. M. 73"	194.69

From Bryden ranch east 2.8 miles (spur line)

Bryden ranch, 1.3 miles southeast of, 400 feet east of junction of road, 10 feet west of road, in base of 24-inch oak tree; spike with aluminum tag stamped "324 B. M. 70"	324.90
Buckeye School, 2 miles north of, south side of road, on hill above creek, in base of 36-inch oak tree; spike with aluminum tag stamped "292 B. M. 71"	292.50
Buckeye School, 2.6 miles northeast of, 2 miles north of Chinn Butte triangulation station, on first section line east of butte, 20 feet north of road at section line; iron post stamped "334 B 1909 B. V"	334.890

SMARTSVILLE QUADRANGLE, INCLUDING THE 7½′ QUADRANGLES SHOWN IN FIGURE 44

[Latitude 39°–39° 30′; longitude 121°–121° 30′]

BUTTE, NEVADA, PLACER, AND YUBA COUNTIES

Precise leveling by the U. S. Coast and Geodetic Survey in 1920

Southeast along Southern Pacific R. R.

	Feet
Ostrom, about 2.25 miles south of, on Southern Pacific R. R. at mileage 132, east of track; U. S. G. S. iron post stamped "71 B 1906 B. C." (U. S. C. & G. S. b. m. Q–18)	71.850
Wheatland, about 3 miles north of, on Southern Pacific R. R., in northwest quarter of road crossing at "Hoss" signboard, on right of way, 50 feet from track and 3 feet from fence; a concrete post with disk in top (U. S. C. & G. S. b. m. R–18)	77.864
Wheatland, about 1.5 miles north of, on Southern Pacific R. R., at mileage 129.5, opposite trestle 129–F, 65 feet west of track and 3 feet above it, on east side of abutment at north end of a concrete highway bridge, about 4 inches above highway; a brass disk (U. S. C. & G. S. b. m. S–18)	78.182
Wheatland, at north end of Southern Pacific R. R. depot, 5 feet west of a telegraph pole; U.S.G.S. iron post stamped "86 B 1906 B. D." (U. S. C. & G. S. b. m. T–18)	86.634

Primary leveling by L. F. Biggs and W. H. Monahan in 1908

From Sevenmile House east by road to Parks Bar Bridge crossing river, thence southwest by road to point 1.2 miles southwest of Brophy School

Sevenmile House, 1.6 miles east of, 50 feet east of junction of road, 10 feet north of telephone pole, north of road; iron post stamped "143 4"	143.668

	Feet
Sevenmile House, 4.5 miles east of, 500 feet east of road junction to Browns Valley, north side of road, 150 feet west of dwelling, in boulder; aluminum tablet stamped "191 5"	191.501
Sevenmile House, 6.3 miles east of, west of road, 50 feet east of junction of road, in base of 36-inch pine tree; spike with aluminum tag stamped "247 12"	247.04
Barrier No. 1, 0.3 mile northwest of, 18 feet south of section post 14, 150 feet north of Yuba River; iron post stamped "204.7" (U. S. E. D. b. m. 26)	200.691
Barrier, on top of north abutment; chisel point, painted "220 14"	220.72
Barrier, 0.7 mile southeast of, 400 feet southeast of draw, 400 feet from bar gate, 600 feet south of cabin on knoll, 10 feet north of river, 5 feet south of wire fence, on rock; chisel point, painted "214"	214.27
Parks Bar bridge, 1 mile southwest of, south of road, 20 feet south of bridge over small creek, in base of 24-inch white-oak tree; spike scribed and painted "266 B. M. 42"	266.07
Brady ranch, 0.3 mile southwest of, north of road, at summit of rise, 15 feet north of fence, in country boulder; aluminum tablet stamped "349 18"	349.066
Heigson's ranch, 0.1 mile southwest of, north of road, 15 feet south of fence, on summit of rise, in country boulder; aluminum tablet stamped "227 19"	227.411
Lane ranch, 200 feet north of house, north of road, southeast corner of corral; iron post stamped "97 20"	97.404
From Ostrom southeast along Southern Pacific R. R. to Wheatland	
Ostrom, 2.3 miles south of, east of track, 5 feet north of milepost 133; iron post stamped "71 B 1908 B. C."	71.840
Wheatland, north end of railroad station, 5 feet east of telephone pole; iron post stamped "86 B 1908 B. D."	86.624
Wheatland, water tower, northwest corner of granite foundation; chisel point, iron foot plate stamped "91 B. M. 61"	91.52
Wheatland, in front of north end of station; top of rail	86.3
From Wheatland north to fork of road 2.1 miles west of Brady ranch	
Wheatland, 5 miles northeast of, at northeast corner of T road, near corner of fence; iron post stamped "101 Cal 1908"	101.602
Earle, 300 feet southwest of schoolhouse, at southwest corner of crossroads; iron post stamped "116 Cal 1908"	116.444
Earle, 2 miles north of, at west side of road, 450 feet north of lane leading to house on east side of road, on rock; chiseled square, marked "123"	124.00
Earle, 3.5 miles north of, in southeast corner of lane fence leading to house on right; iron post stamped "189"	190.021
From Earle west by road to point 4.3 miles southeast of Marysville	
Earle, 4 miles west of, 390 feet west of gate leading to the Boardman ranch house; iron post stamped "74 Cal 1908"	74.312
From Parks Bar Bridge east via Smartsville to Mooney Flat and bridge over Deer Creek	
Parks Bar Bridge, north side of road, 30 feet north of bridge, 10 feet east of oak tree, in boulder; aluminum tablet stamped "252" (probably moved in 1913)	251.967

	Feet
Parks Bar Bridge, on northeast abutment; top of bedplate	244.63
Parks Bar Ridge, on southwest abutment; top of bedplate	248.16
Smartsville, 1.4 miles north of, at northeast corner of bridge over Yuba Creek, top of truss; painted bolt with aluminum tag stamped "345 16"	344.79
Smartsville, 250 feet east of schoolhouse, south of road, 10 feet south of junction of road, on large boulder painted "619 18;" chisel point	619.55
Smartsville, southeast corner of porch foundation to Reardon's hotel; aluminum tablet stamped "684 9"	683.901
Smartsville, 0.6 mile south of, east of road at road junction, on boulder painted "792 19;" chisel point	791.78
Smartsville, 1.2 miles north of, east of road, 100 feet east of crossroads, 15 feet north of ditch on summit of hill, in boulder; aluminum tablet stamped "996 10"	956.132

From point 4.5 miles west of Bridgeport south and west along south bank of Yuba River to Parks Bar

Mouth of South Fork of Yuba River, 4.4 miles southwest of, south bank of river, at James Bar, 25 feet west of cable over river, on rock painted "373 33;" chisel point	373.27
Mouth of South Fork of Yuba River, 5.7 miles southwest of, opposite draw, south side of river, 1,000 feet west of barn on opposite bank of river, 50 feet west of claim stake, on rock painted "346 34;" chisel point	346.55
Mouth of South Fork of Yuba River, 6.5 miles southwest of, southwest point of mouth of draw, 500 feet west of draw on opposite side of river, steep rocky point, 50 feet above river bed, in large boulder; aluminum tablet stamped "354 16"	354.545
Mouth of Deer Creek, 200 feet east of, on bench, east bank of creek, south bank of Yuba River, in top of knot in 30-inch two-forked oak tree scribed and painted "329 35;" spike	328.59
Mouth of Deer Creek, 0.7 mile southwest of, south side of river, upper end of gorge at bend of river opposite steep bluff underneath overhanging rock, on boulder painted "287 37;" chisel point	287.05
Narrows, 15 feet east of north anchorage of cable, on rock point; aluminum tablet stamped "318 17"	318.313
Parks Bar bridge, 2.6 miles east of, at end of long sand bar, 15 feet south of 36-inch live-oak tree overhanging bank, on bedrock painted "259 39;" chisel point	269.71
Parks Bar bridge, 0.5 mile east of, north bank of river, on point between two draws, 20 feet north of water's edge, on rock painted "227 41;" chisel point	237.76

Primary leveling by L. F. Biggs in 1908

From point near Mooney Flat northeast to Bridgeport, thence west 4.5 miles

Mooney Flat, 1.3 miles northeast of schoolhouse, north of road, 15 feet south of 36-inch bull-pine tree, on boulder painted "797 23;" chisel point	795.61
Mooney Flat, 2 miles northeast of schoolhouse, south of road, opposite round hill, in large boulder; aluminum tablet stamped "1011 11"	1,011.420

	Feet
Mooney Flat, 3 miles northeast of, north of road, 50 feet west of end of lane, near top of ridge, on boulder painted "1168 24;" chisel point	1,167.36
Mooney Flat, 4.1 miles northeast of, east of road, on summit of ridge, bend of road, on steep bluff, on large boulder painted "1223 26;" chisel point	1,223.30
Anthony House, 1 mile northeast of, north of road, 20 feet east of ditch, on summit of rise, on boulder painted "1259 29;" chisel point	1,259.78
Anthony House, 1.6 miles northeast of, south of road, at ditch crossing, 500 feet east of cemetery, in boulder; aluminum tablet stamped "1334 12"	1,334.516
Rapps ranch, 0.7 mile northeast of, north of road, on boulder painted "1000 30;" chisel point	1,000.885

Primary leveling by L. F. Biggs in 1908 (not published in Bulletin 481)

From Bridgeport west along south bank of Yuba River

Bridgeport, 250 feet south of bridge over south fork of Yuba River, north side of road, between two barns, on large boulder; aluminum tablet stamped "566 P.B.M. 13"	566.699
Junction of South Fork and main Yuba River, 300 feet southwest of, south bank of river, 50 feet west of live-oak tree 4-forked and 24-inch diameter, on large boulder; aluminum tablet stamped "500 P.B.M. 14"	500.356
Surface of water at junction of South Fork and Yuba River, April 22, 1909	465.3
Mouth of South Fork of Yuba River, 0.8 mile west of, south bank of river, at mouth of creek from south, rocky point 30 feet west of falls; chiseled point on rock, painted "473 B. M. 31"	473.25
Mouth of South Fork of Yuba River, 2.1 miles southwest of, 50 feet south of river, 200 feet east of rapids where river bends southerly, in base of madrone tree 18 inches in diameter; spike, marked "450 B.M. 32"	450.27
South Fork of Yuba River; water surface, April 24, 1908	370.6
Mouth of South Fork of Yuba River, 3.5 miles southwest of, 30 feet south of river, 100 feet above rapids opposite canyon where power line comes over hill at rocky point, in bed rock; aluminum tablet stamped "403 P.B.M. 15"	403.411

DEGREE QUADRANGLE 39°–40°, 122°–123°

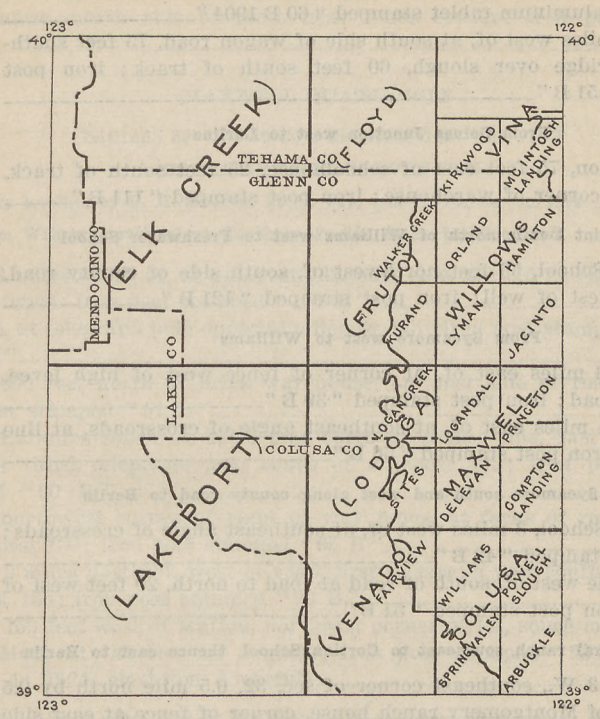


FIGURE 45.—Diagram of degree quadrangle 39°–40°, 122°–123°

COLUSA QUADRANGLE

[Latitude 39°–39° 15′; longitude 122°–122° 15′]

COLUSA COUNTY

Primary leveling by C. H. Semper and E. M. Fry in 1904

From Colusa Junction south along Southern Pacific R. R. to Arbuckle

	Feet
Colusa Junction, 100 feet south of station, 300 feet north of railroad crossing, east of track; iron post stamped "79 B"	79.349
Williams, 2 miles north of, 60 feet west of track, north of road, on line of right of way fence, at crossroads; iron post stamped "73 B"	73.938
Williams, 110 feet west of track, 125 feet northwest of station, south side of street; iron post stamped "79 B"	79.445
Williams, 4 miles south of, 250 feet south of milepost 121, fence corner at road crossing; iron post stamped "90 B"	90.205
Arbuckle, 2.4 miles north of, east of road, 100 feet west of track, at fence opposite milepost 117; iron post stamped "106 B"	106.994
Arbuckle, 130 feet west of, at base of 50-foot flagpole; iron post stamped "137 B"	137.283

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From Colusa west to Colusa Junction

	Feet
Colusa, 150 feet west of corner of Ninth and Market streets, 10 feet south of sidewalk, on south side of street, in city park; iron post stamped "58 B"	58.865
Colusa, north wall of Colusa County courthouse, 15 feet west of main entrance; aluminum tablet stamped "60 B 1904"	60.975
Colusa, 3.5 miles west of, at south side of wagon road, 75 feet southeast of bridge over slough, 60 feet south of track; iron post stamped "51 B"	51.805

From Colusa Junction west to Lurline

Lurline station, 75 feet east of schoolhouse, 25 feet south of track, northwest corner of warehouse; iron post stamped "111 B"	111.623

From point 1 mile north of Williams west to Freshwater School

Freshwater School, 50 feet northwest of, south side of county road, 100 feet west of well; iron post stamped "121 B"	121.553

From Sycamore west to Williams

Williams, 6.6 miles east of, at corner of fence west of high levee, north of road; iron post stamped "39 B"	40.184
Williams, 3.4 miles east of, at southeast angle of crossroads, at line of fence; iron post stamped "56 B"	57.091

From Sycamore south and west along county road to Berlin

Dry Slough School, 3 miles west of, at southeast angle of crossroads; iron post stamped "42 B"	42.725
Prize, 0.5 mile west of, south of road at road to north, 20 feet west of bridge; iron post stamped "51 B"	51.773

From Pastoral ranch southeast to Cortina School, thence east to Berlin

T. 15 N., R. 3 W., southeast corner of sec. 32, 0.5 mile north by 0.5 mile east of Montgomery ranch house, corner of fence at east side of road, on township line; iron post stamped "167 B"	167.727
Cortina School, 0.2 mile west of, southwest corner of sec. 14, T. 14 N., R. 3 W., corner of fence; iron post stamped "211 B"	211.698

From forks of road 12 miles east of Cortina School south to common corner of Tps. 13 and 14 N., Rs. 2 and 3 W.

Arbuckle, 4.5 miles west of, 30 feet south of corner of Tps. 13 and 14 N., Rs. 2 and 3 W., corner of fence; iron post stamped "284 B"	284.774

FRUTO QUADRANGLE, INCLUDING KURAND AND WALKER CREEK 7½ QUADRANGLES

[Latitude 39° 30′–39° 45′; longitude 122° 15′–122° 30′]

GLENN COUNTY

Primary leveling by H. Hartley in 1904

From Willows west along county road 5.5 miles, thence north to point 4.5 miles west of Orland, thence to Orland

	Feet
Willows, 5 miles west of, south side of road near crossroads, opposite schoolhouse; iron post stamped "190 B"	190.668
T. 20 N., R. 4 W., sec. 23, Feeny place, west side of road near barn; iron post stamped "190 B"	190.551

	Feet
T. 20 N., R. 3 W., northwest corner of sec. 1, south of road; iron post stamped "204 B"	204.717
T. 21 N., R. 4 W., northwest corner of sec. 24, west of road; iron post stamped "251 B"	251.666
T. 21 N., R. 4 W., northwest corner of sec. 1, 600 feet east of Butte ranch house, north side of road, near fence corner; iron post stamped "281 B"	281.669

MAXWELL QUADRANGLE

[Latitude 39° 15′–39°30′; longitude 122°–122° 15′]

COLUSA AND GLENN COUNTIES

Primary leveling by C. H. Semper, E. M. Fry, and H. Hartley in 1904

From Willows south along Southern Pacific R. R. to Woodland

	Feet
Willows, 3 miles south of, at milepost 148, east side of road at right of way fence; iron post stamped "111 B"	111.691
Logandale, at telegraph pole opposite milepost 145; iron post stamped "103 B"	102.800
Norman, 600 feet north of brick warehouse, on west side of road; iron post stamped "91 B"	92.125
Norman, 1.2 miles south of, 1,800 feet north of county line, east of road, at third telephone pole south of milepost 142; iron post stamped "90 B"	91.130
Delavan, northwest corner of right of way fence, at forks of road, at milepost 139; iron post stamped "95 B"	96.199
Maxwell, 2 miles north of, west of road, first telegraph pole south of milepost 136; iron post stamped "90 B"	90.408
Maxwell, 150 feet west of station, northeast corner of lot, south margin of Main St., at base of flagpole; iron post stamped "93 B" (moved in 1924, elevation doubtful)	93.799

From point 3 miles east of Willows south and west to Norman

Willows, 4 miles south by 3 miles east of, at southwest corner of fence at forks of road; iron post stamped "97 B"	96.353
Willows, 6.4 miles south by 3 miles east of, east side of road at southwest corner of fence; iron post stamped "86 B"	84.684

From Norman east to Princeton, thence north to Glenn

Princeton, 3 miles west of, west of gate, 1 foot from fence at south side of road; iron post stamped "70 B"	71.039
Princeton, 1 foot north of north wall of brick building used as general store and post office, 3 feet west of well, 10 feet west of Commercial St.; iron post stamped "80 B"	81.017
Princeton, 4 miles north of, 50 feet east of wagon bridge over canal, at fence corner, 30 feet southwest of crossroads; iron post stamped "86 B"	86.783

From point 3 miles east of Norman south and west to Maxwell

Glenn-Colusa county line, 60 feet east of fence, T. 18 N., between Rs. 2 and 3 W.; iron post stamped "71 B"	70.017
Excelsior School, 200 feet west of, on east side of road; iron post stamped "62 B"	61.231

	Feet
Maxwell, 4 miles east of, south side of road, at forks; iron post stamped "56 B"	55.253

From Excelsior School east across country to Compton Landing, thence north to Princeton

Compton Landing, 0.2 mile south of, corner of fence at west side of road; iron post stamped "67 B"	67.947
Princeton, in front wall of brick store building (property of P. P. Tapscott) 5 feet south of door, east side of Commercial St., aluminum tablet stamped "83 B"	83.747

From Compton Landing south to Colusa

Colusa, 5 miles north of, 150 feet southwest of Sever's ranch house, 25 feet east of forks of road; iron post stamped "60 B"	61.029

From forks of roads 4 miles west of Norman south 3 miles, thence east 1 mile

Norman, 3 miles west by 3 miles south of, lower Campbell ranch, northeast corner of bunk house, 400 feet northeast of water tank; iron post stamped "117 B"	117.870

LODOGA AND VENADO 15′ QUADRANGLES

[Latitude 30°–39° 30′; longitude 122° 15′–122° 30′]

COLUSA AND GLENN COUNTIES

Primary leveling by H. Hartley and E. M. Fry in 1904

From crossroads 5 miles west of Willows along road south to crossroads 5 miles west of Norman, thence to Norman

	Feet
T. 19 N., R. 4 W., northwest corner of sec. 26, on north and west side of road; iron post stamped "170 B"	170.726
T. 18 N., R. 4 W., northwest corner of sec. 11, south and east of road; iron post stamped "168 B"	168.881
T. 18 N., R. 4 W., northwest corner of sec. 24, 4 miles west of Norman, north and east side of road; iron post stamped "135 B"	135.849

From point 3 miles south by 3 miles west of Norman southwest to Golden Gate School, thence south to Lurline

Mills station, 3 miles north of, 50 feet northeast of Campbell's house, 40 feet east of blacksmith shop, northeast corner of yard fence, at south side of road; iron post stamped "157 B"	157.741
Golden Gate School, 1 mile south of, 400 feet south of Malloway ranch house, west side of road, 6 feet west of gate; iron post stamped "243 B"	243.780
Mills station, 120 feet east of water tank, northeast corner of platform, 5 feet south of track; iron post stamped "146 B"	146.857

From Fairview Station south along county road to Freshwater

Manor ranch, 0.2 mile southwest of ranch house, corner of fence at south side of county road; iron post stamped "157 B"	157.697

From Manor ranch south to Storal ranch

	Feet
Storal ranch house (West ranch), 600 feet northeast of, at west end of large gate, north side of road; iron post stamped "183 B"	183.728

VINA QUADRANGLE

[Latitude 39° 45′–40°; longitude 122°–122° 15′]

BUTTE, GLENN, AND TEHAMA COUNTIES

Precise leveling by the U. S. Coast and Geodetic Survey in 1920

South along Southern Pacific R. R.

	Feet
Bohemia, a signpost stop on Southern Pacific R. R., at mileage 208, 300 feet south of signpost, east of track, in south end of concrete culvert 207–A; an unlettered square (U. S. C. & G. S. b. m. U–16)	209.278
Ensign, a signpost stop on Southern Pacific R. R., at mileage 207.1, opposite culvert 206–C, at south end of a highway bridge, about 65 feet east of track, in southernmost ornamental concrete railing post on west side of and 3 feet above road; brass disk (U. S. C. & G. S. b. m. V–16)	204.642
Vina, about 3 miles north of, on Southern Pacific R. R., at mileage 206.1, opposite railroad bridge 206–B, at south end of a concrete highway bridge, on west side of and 3 feet above road, on southernmost ornamental concrete railing post; brass disk (U. S. C. & G. S. b. m. W–16)	208.435
Vina, about 2.75 miles north of, on Southern Pacific R. R., at mileage 205.7, near old milepost; U. S. G. S. iron post stamped "201 B 1902" (U. S. C. & G. S. b. m. X–16)	202.414
Vina, about 2.25 miles north of, on Southern Pacific R. R., at mileage 205.2, east of and slightly below track, on north end of concrete culvert 205–A; brass disk (U. S. C. & G. S. b. m. Y–16)	200.511
Vina, about 1 mile north of, on Southern Pacific R. R., opposite culvert 204–A, 80 feet west of track, in concrete abutment of irrigation canal gates on north side of canal, which is at a road crossing near milepost 204; square cut (U. S. C. & G. S. b. m. Z–16)	212.270
Vina, about 0.5 mile north of, on Southern Pacific R. R., west of track, on north basalt abutment of bridge 203–E, over Deer Creek, near edge of top block; outlined square (U. S. C. & G. S. b. m. A–17)	216.633
Vina, on Southern Pacific R. R., about 200 feet north of depot, 130 feet east of track, in north concrete pier of a large wooden water tank, 1 foot above ground; brass disk (U. S. C. & G. S. b. m. B–17)	208.074
Vina, about 1.5 miles south of, on Southern Pacific R. R., at mileage 201.5, 10 feet west of track, in south end of concrete culvert 201–A; brass disk (U. S. C. & G. S. b. m. G–17)	196.082
Vina, about 4 miles south of, on Southern Pacific R. R., 225 feet north of milepost 199, west of track, in north end of concrete culvert 199–A; brass disk (U. S. C. & G. S. b. m. D–17)	178.346
Vina, about 5 miles south of, on Southern Pacific R. R., 200 feet north of milepost 198, in north basalt abutment of bridge over Pine Creek, west of track near edge of abutment; an outlined square (U. S. C. & G. S. b. m. E–17)	184.088

	Feet
Vina, about 6.25 miles south of, on Southern Pacific R. R., at mileage 196.7, near old milepost and 10 telegraph poles south of the present milepost 197, 35 feet east of track; U. S. G. S. iron post stamped "169 B 1902" (U. S. C. & G. S. b. m. F–17)	169.931

Precise leveling by C. H. Semper in 1903

North along Southern Pacific R. R.

Cana, in front of station; top of rail	168.8
Cana, 0.7 mile north of, on east side of railroad, 3 feet north of old milepost 198; iron post stamped "169 B 1902" (C. & G. S. b. m. F–17)	169.931
Cana, 3.6 miles north of, east side of railroad, 3 feet north of old milepost 201; iron post stamped "179 B 1902"	179.888
Vina, 0.4 mile south of, on east side of railroad, 3 feet north of old milepost 204; iron post stamped "202 B 1902"	203.056
Vina, in front of station; top of rail	206.4

Primary leveling by S. E. Blout and E. W. Glafcke in 1903

From St. Johns northwest to McIntosh ranch, thence north via Squaw Hill to Vina

Stony Creek station, 6 miles east of, 0.4 mile south of McIntosh's ranch house, intersection of private road with county road, 30 feet northwest of forks, 2 feet south of fence corner; iron post stamped "185 B"	185.796
Squaw Hill ferry, 250 feet west of west landing, in fence corner; iron post stamped "196 B"	196.962

From Orland north along county road to Corning

Orland, 2.6 miles north of, east side of road, 5 feet west of fence; iron post stamped "273 B"	272.286
Orland, 4 miles north of, west side of road, 300 feet north of dry creek, at foot of electric pole 1233; iron post stamped "274 B"	273.804
Orland, 6.6 miles north of, west side of road, 60 feet west of electric pole 1116; iron post stamped "286 B"	285.849
Orland, 10 miles north of, east side of road, in Maywood Colony, at electric pole 964; iron post stamped "271 B"	270.772
Corning, 100 feet west of station, south side of street, at northwest corner of warehouse; iron post stamped "273 B"	272.210

From Corning east along county road to Squaw Hill Ferry

Corning, 3 miles east of, south side of road, at crossroads, 8 feet east of telephone pole; iron post stamped "222 B"	221.165

From crossroads 3 miles east of Corning south along county road to crossroads 3 miles east of Orland

Corning, 4 miles south by 3 miles east of, common corner of secs. 5, 6, 7, and 8, T. 23 N., R. 2 W., at fence; iron post stamped "217 B"	216.828
Kirkwood, 2.5 miles southeast of, east side of road, at fence corner; iron post stamped "215 B 35"	214.306
Malton, 2 miles east by 0.4 mile south of, 1 mile south of Jones ranch, west side of road, at clump of fig trees; iron post stamped "220 B"	219.450

From Tehama south along county road to crossroads 3 miles east of Corning

	Feet
Tehama, 3.5 miles south of, 0.75 mile north of Thom Creek, east side of road, at foot of telegraph pole; iron post stamped "222 B"	221.461

From Corning north along county road to crossroads 7 miles north of Corning

Corning, 3 miles northwest of, at crossroads, west side of road, 5 feet north of telephone pole; iron post stamped "303 B"	304.135

WILLOWS QUADRANGLE

[Latitude 39° 30′–39° 45′; longitude 122°–122° 15′]

GLENN COUNTY

Primary leveling by S. E. Blout and E. W. Glafcke in 1903 and by E. M. Fry and C. L. Nelson in 1904

From Willows north along railroad to Orland

	Feet
Willows, Glenn County courthouse steps; aluminum tablet stamped "138 B"	138.737
Willows, 700 feet north of station, 10 feet east of Southern Pacific R. R. track, 3 feet east of milepost 151 and section post 48–49, southwest corner of brick warehouse; aluminum tablet stamped "134 B"	134.769
Lyman, 0.2 mile south of, opposite milepost 154, east side of county road, beside right of way fence; iron post stamped "138 B"	137.898
Germantown, 0.7 mile south of, west side of county road, 900 feet south of crossroads, opposite milepost 157; iron post stamped "159 B"	159.026
Germantown, 2.5 miles north of, east side of county road, opposite milepost 160, at forks of road; iron post stamped "185 B"	184.801
Greenwood, at crossroads, west of station, west side of county road, opposite milepost 163; iron post stamped "230 B"	229.441
Orland, northwest corner of Bank of Orland; aluminum tablet stamped "256 B"	256.748

From Orland easterly to St. John

Orland, 3 miles east of, 200 feet south of crossroads, east side of road at orchard; iron post stamped "217 B 37"	215.807

From point 3 miles west of Orland south along township line to point 3 miles east of Willows, thence to Willows

Greenwood, 3 miles east of, northwest corner of fence at crossroads, 0.5 mile south of cemetery; iron post stamped "200 B 38"	199.272
T. 21 N., R. 3 W., southeast corner of sec. 24, west side of road, 0.25 mile west of large lone tree, in field; iron post stamped "171 B 39"	170.118
T. 20 N., R. 2 W., southwest corner of sec. 6, crossroads at Schlouse ranch house, at northeast fence corner; iron post stamped "152 B 40"	150.983
T. 20 N., R. 2 W., east of county road, 370 feet south of Central Canal; iron post stamped "135 B"	133.416
Willows, 3.2 miles east of, at crossroads, 100 feet north of ranch house, east side of road; iron post stamped "111 B"	110.741

From Chico west to St. John, thence south to Jacinto, thence west to township line

	Feet
St. John, 300 feet south of Stony Creek, 40 feet northeast of intersection of roads, in southwest corner of school yard; iron post stamped "143 B"	143.796
St. John, 2.4 miles south of, 1,200 feet southwest of white house, first turn in road to west, 12 feet northwest of fence corner; iron post stamped "134 B"	134.763
St. John, 5.1 miles south of, 150 feet north of bridge, 30 feet northeast of intersection of county roads and private road, 600 feet west of frame house, 2 feet northwest of fence corner; iron post stamped "122 B"	122.820
Jacinto, 0.1 mile north of, 500 feet north of red-brick store, 20 feet south and 20 feet west of road, 6 feet west of signpost; iron post stamped "108 B"	108.786

From Jacinto south to Glenn

Sidds Landing, at southeast corner of warehouse, 50 feet west of river, 50 feet east of road; iron post stamped "106 B"	106.735
Glenn, 0.5 mile south of, 50 feet east of road, at front entrance to old schoolhouse, at south end of steps; iron post stamped "93 B"	93.787

DEGREE QUADRANGLE 40°–41°, 122°–123°

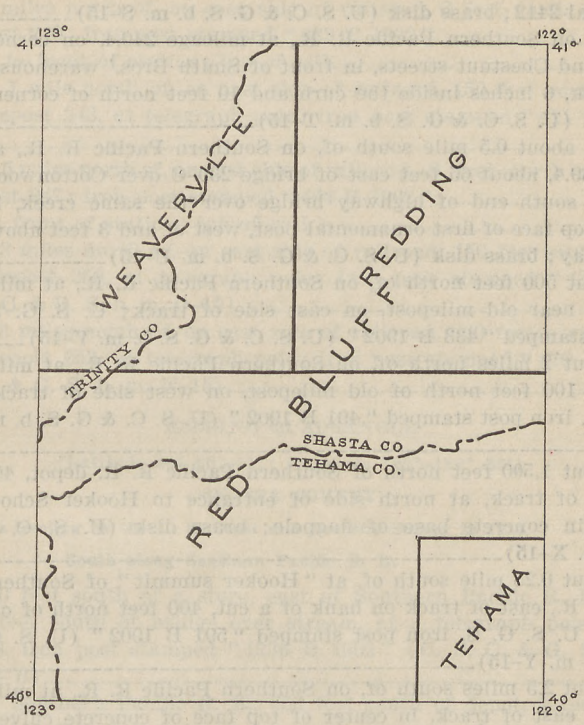


FIGURE 46.—Diagram of degree quadrangle 40°–41°, 122°–123°

RED BLUFF QUADRANGLE

[Latitude 40°–41°; longitude 122°–123°]

SHASTA, TEHAMA, AND TRINITY COUNTIES

Precise leveling by the U. S. Coast and Geodetic Survey in 1920

South along Southern Pacific R. R.

	Feet
Anderson, about 1.25 miles north of, on Southern Pacific R. R., at mileage 248.4, 35 feet east of track, near the old milepost; U. S. G. S. iron post stamped "434 B 1902" (U. S. C. & G. S. b. m. O–15)	435.285
Anderson, at northwest corner of Center and Ferry streets, in sidewalk 6 inches from front face of concrete building facing Southern Pacific R. R. track, building is owned by Mr. Hailine and occupied by Mr. C. A. Black's drug store; brass disk (U. S. C. & G. S. b. m. R–15)	429.779

	Feet
Anderson, about 500 feet south of, on Southern Pacific R. R., at mileage 247, 15 feet east of track, in top face of north abutment of concrete culvert 246–J over Anderson Creek, under the railing; brass disk (U. S. C. & G. S. b. m. Q–15)	429.947
Cottonwood, about 0.75 mile north of, on Southern Pacific R. R., at mileage 241.1, near culvert 241–A, on base under ladder of home block signal 2412; brass disk (U. S. C. & G. S. b. m. S–15)	425.039
Cottonwood, on Southern Pacific R. R., at mileage 240.4, on corner of Front and Chestnut streets, in front of Smith Bros.' warehouse, in sidewalk, 6 inches inside the curb and 10 feet north of corner; brass disk (U. S. C. & G. S. b. m. T–15)	419.373
Cottonwood, about 0.5 mile south of, on Southern Pacific R. R., at mileage 239.4, about 65 feet east of bridge 239–C over Cottonwood Creek, on south end of highway bridge over the same creek, in center of top face of first ornamental post, west of and 3 feet above the roadway; brass disk (U. S. C. & G. S. b. m. U–15)	417.565
Draper, about 500 feet north of, on Southern Pacific R. R., at mileage 238.4, near old milepost, on east side of track; U. S. G. S. iron post stamped "433 B 1902" (U. S. C. & G. S. b. m. V–15)	434.248
Hooker, about 2 miles north of, on Southern Pacific R. R., at mileage 235.4, 100 feet north of old milepost, on west side of track; U. S. G. S. iron post stamped "491 B 1902" (U. S. C. & G. S. b. m. W–15)	492.230
Hooker, about 1,500 feet north of Southern Pacific R. R. depot, 460 feet west of track, at north side of entrance to Hooker School building, in concrete base of flagpole; brass disk (U. S. C. & G. S. b. m. X–15)	526.810
Hooker, about 0.25 mile south of, at "Hooker summit" of Southern Pacific R. R., east of track on bank of a cut, 400 feet north of old milepost; U. S. G. S. iron post stamped "591 B 1902" (U. S. C. & G. S. b. m. Y–15)	592.036
Hooker, about 2.5 miles south of, on Southern Pacific R. R., at mileage 231.1, east of track, in center of top face of concrete culvert 231–C; brass disk (U. S. C. & G. S. b. m. Z–15)	520.534
Blunt, about 0.5 mile north of, on Southern Pacific R. R. at mileage 229.4, 100 feet south of old milepost, 100 feet north of home-block signals 2294 and 2295, east of track; iron post stamped "437 B 1902" (U. S. C. & G. S. b. m. A–16)	438.109
Blunt, about 1 mile south of, on Southern Pacific R. R., 400 feet south of milepost 228, west of track, in center of top of concrete culvert 227–H; brass disk (U. S. C. & G. S. b. m. B–16)	415.822
Red Bluff, on Southern Pacific R. R., at mileage 226.4, 300 feet north of old milepost, 1,000 feet south of block signal 2267, east of track, near a telegraph pole; U. S. G. S. iron post stamped "370 B 1902 7" (U. S. C. & G. S. b. m. C–16)	370.780

Precise leveling by C. H. Semper in 1903

North along Southern Pacific R. R.

Red Bluff, 3.1 miles north of, on east side of railroad, 300 feet north of old milepost 228, 15 feet from fence; iron post stamped "370 B 1902" (C. & G. S. b. m. [illegible]–16)	370.826
Red Bluff, 6 miles north of, on east side of railroad, 100 feet south of old milepost 231, at telegraph pole; iron post stamped "437 B 1902" (C. G. S. b. m. A–16)	438.109

	Feet
Red Bluff, 9 miles north of, on east side of railroad, 400 feet north of old milepost 234, at fence line; iron post stamped "591 B 1902"	592.036
Hooker, in front of station; top of rail	539.9
Hooker, 1.8 miles north of, 110 feet north of old milepost 237, 30 feet west of track, at telegraph pole; iron post stamped "491 B 1902"	492.230
Hooker, 4.7 miles north of, on east side of railroad, 3 feet north of old milepost 240; iron post stamped "433 B 1902"	434.245
Cottonwood, in front of station; top of rail	418.5
Cottonwood, 1 mile north of, on east side of railroad, 150 feet north of old milepost 243, at telegraph pole; iron post stamped "421 B 1902"	422.134
Cottonwood, 5 miles north of, on east side of railroad, 3 feet north of old milepost 247; iron post stamped "464 B 1902"	465.464
Anderson, in front of station; top of rail	429.0
Anderson, 1.3 miles north of, on east side of railroad, 150 feet south of old milepost 250, at telegraph pole; iron post stamped "434 B 1902" (C. & G. S. b. m. O–15)	435.285
Anderson, 4.3 miles north of, on east side of railroad, 300 feet north of old milepost 253, at telegraph pole; iron post stamped "470 B 1902" (C. & G. S. b. m. N–15)	471.167

REDDING QUADRANGLE

[Latitude 40° 30′–41°; longitude 122°–122° 30′]

SHASTA COUNTY

Precise leveling by the U. S. Coast and Geodetic Survey in 1920

South along Southern Pacific R. R.

	Feet
Lamoine, 600 feet south of a store, east of Southern Pacific R. R. track, 20 feet south of bridge over stream, at a telegraph pole; U. S. G. S. iron post stamped "1236 B 1902" (U. S. C. & G. S. b. m. 1236–B)	1,237.691
Lamoine, on Southern Pacific R. R., 650 feet south of depot, 7 feet east of and 3 feet below track, on north concrete abutment of double-track bridge over Slate Creek; brass disk (U. S. C. & G. S. b. m. G–14)	1,237.484
Delta, about 1 mile south of, on Southern Pacific R. R., 5 feet west of and 2.5 feet below track, on north masonry abutment of fifth crossing from the south over Sacramento River; brass disk (U. S. C. & G. S. b. m. H–14)	1,117.399
Antler, about 3 miles north of, on Southern Pacific R. R., at mileage 293.4, east of track, at a telegraph pole; U. S. G. S. iron post stamped "1,034 B 1902" (U. S. C. & G. S. b. m. I–14)	1,035.569
Antler, about 0.75 mile north of, on Southern Pacific R. R., 230 feet south of home-block signal at north end of Smithson siding, 5 feet west of and 0.8 meter below track; concrete post with disk in top (U. S. C. & G. S. b. m. J–14)	973.781
Pollock, about 1 mile north of, on Southern Pacific R. R., 20 feet east of and 1 foot below track, on large concrete retaining wall at culvert 288–E; brass disk (U. S. C. & G. S. b. m. K–14)	923.751
Pollock, on concrete bridge of Lincoln Highway over Sacramento River, at northwest corner of first pier east of Southern Pacific R. R. track, 3 feet east of and 2.5 feet above siding track; brass disk (U. S. C. & G. S. b. m. L–14)	905.372

	Feet
Pollock, about 0.5 mile south of, on Southern Pacific R. R., east of track, north of culvert 286–J; U. S. G. S. iron post stamped "901 B 1902" (U. S. C. & G. S. b. m. 901–B)	902.567
Pollock, about 1.25 miles south of, on Southern Pacific R. R., 10 feet west of and 8 inches below track, on south masonry abutment of third crossing from south over Sacramento River; an outlined square (U. S. C. & G. S. b. m. M–14)	893.958
Elmore, about 0.5 mile south of, on Southern Pacific R. R., 900 feet east of center of trestle over Sacramento River and 58 feet south of tracks; U. S. G. S. iron post stamped "789 B 1902" (U. S. C. & G. S. b. m. N–14)	789.739
Morley, about 1⅓ miles north of, on Southern Pacific R. R., 5 feet east of and 9 feet below track, on top surface of large concrete retaining wall, 100 feet south of culvert 281–D which passes through wall; brass disk (U. S. C. & G. S. b. m. O–14)	737.138
Morley, across Southern Pacific R. R. track from railroad fuel oil pumping plant, at mileage 280.5; U. S. G. S. iron post stamped "722 B 1902" (U. S. C. & G. S. b. m. P–14)	723.542
Kennet, about 1.75 miles north of, on Southern Pacific R. R., at mileage 277.5, east of track, at a telegraph pole; U. S. G. S. iron post stamped "679 B 1902" (U. S. C. & G. S. b. m. Q–14)	679.782
Kennet, 285 feet east of Southern Pacific R. R. track, on steel highway bridge over Sacramento River, top surface of west concrete pier of center span on north side of bridge roadway; brass disk (U. S. C. & G. S. b. m. R–14)	663.119
Kennet, across the Southern Pacific R. R. track from depot, at northeast corner of brick post office, in vertical face of concrete foundation, about 2.5 feet above ground; brass disk (U. S. C. & G. S. b. m. S–14)	682.820
Kennet, about 1⅓ miles west of, on Southern Pacific R. R., at mileage 274.4, east of track, at a telegraph pole; U. S. G. S. iron post stamped "654 B 1902" (U. S. C. & G. S. b. m. T–14)	655.202
Coram, on Southern Pacific R. R., about ⅛ mile north of station, in top surface of north side wall at east end of concrete arch 271 F under track; brass disk (U. S. C. & G. S. b. m. U–14)	622.853
Coram, about 1.25 miles south of, on Southern Pacific R. R., on horizontal surface of west head wall of concrete culvert or flushout 269–G, over north approach wall; brass disk (U. S. C. & G. S. b. m. V–14)	611.623
Motion, on Southern Pacific R. R., 200 feet south of milepost 258, 35 feet east of track, in center of top face of concrete culvert 267–M under railing; brass disk (U. S. C. & G. S. b. m. A–15)	593.887
Cuargo, a signpost flag stop on Southern Pacific R. R., at mileage 266.8, 10 feet east of track, in horizontal top face of concrete culvert 266–G; brass disk (U. S. C. & G. S. b. m. B–15)	591.725
Keswick, about 0.5 mile north of, on Southern Pacific R. R., at mileage 264.5, east of track, at north end of a sharp cut, 400 feet north of block signal 2643, 200 feet south of culvert 264–G; iron pipe stamped "569 B 1902" (U. S. C. & G. S. b. m. C–15)	570.507
Keswick, about 500 feet south of, on Southern Pacific R. R., at mileage 263.7, about 250 feet west of track, near culvert 263–F, in top face of retaining wall, beside a spur track leading through gulch known as Spring Creek to a mine on hill; brass disk (U. S. C. & G. S. b. m. D–15)	555.478

	Feet
Keswick, about 2 miles south of, on Southern Pacific R. R., 300 feet north of milepost 262, 10 feet east of track, on north side of trestle 262–A over Rock Creek; brass disk (U. S. C. & G. S. b. m. E–15)	537.168
Middle Creek, 16 feet west of Southern Pacific R. R. track, 100 feet north of milepost 261, opposite hotel; U. S. G. S. iron post stamped "521 B 1902" (U. S. C. & G. S. b. m. F–15)	522.384
Redding, about 0.5 mile north of, on Southern Pacific R. R., at mileage 259, in southwest end of large concrete bridge known as Redding Highway Bridge which spans Sacramento River, on north side of roadway, near pillar for first lamp-post and about 0.5 foot above road; brass disk (U. S. C. & G. S. b. m. P–15)	516.931
Redding, on Southern Pacific R. R., 500 feet south of depot, 400 feet north of milepost 258, west of track, in top face of east end of culvert 258–A; brass disk (U. S. C. & G. S. b. m. H–15)	550.596
Redding, at entrance to city hall, in southeast corner of alcove facing Market St., in cement floor, 6 inches from either wall; brass disk (U. S. C. & G. S. b. m. I–15)	560.356
Redding, about 165 feet east of Southern Pacific R. R. track, in Lorens Hotel building, on corner next to Carnegie City Library and occupied by Western Union Telegraph Co., in sandstone pillar facing Yuba St., about 2 feet above ground; brass disk (U. S. C. & G. S. b. m. J–15)	555.826
Redding, on east face of county courthouse, near corner of first break in face of building, about 5 feet above ground; U. S. G. S. aluminum tablet stamped "590 B 1902" (U. S. C. & G. S. b. m. K–15)	590.753
Redding, about 2.5 miles south of, on Southern Pacific R. R., 700 feet south of milepost 256, 5 feet west of track and 3 feet above ground, in top face of a concrete pipe container; brass disk (U. S. C. & G. S. b. m. L–15)	490.701
Redding, about 3.75 miles south of, on Southern Pacific R. R., 3 feet north of old milepost 256 but at present mileage 254.4, east of track and 50 feet south of road crossing; U. S. G. S. iron post stamped "474 B 1902" (U. S. C. & G. S. b. m. G–15)	475.127
Girvan, about 1 mile north of, on Southern Pacific R. R., 700 feet north of milepost 253, in top face of north abutment of Clear Creek highway bridge, 5 feet west of railroad bridge 253–B, on east side of and at same elevation as road; brass disk (U. S. C. & G. S. b. m. M–15)	454.871
Girvan, about 0.75 mile south of, on Southern Pacific R. R., at mileage 251.5, 325 feet south of culvert 251–E, near old milepost; U. S. G. S. iron post stamped "470 B 1902" (U. S. C. & G. S. b. m. N–15)	471.167

Precise leveling by C. H. Semper in 1903

North along Southern Pacific R. R.

Anderson, 7.2 miles north of, on east side of railroad, 3 feet north of old milepost 256; iron post stamped "474 B 1902" (C. & G. S. b. m. G–15)	475.127
Redding, 0.7 mile south of, on east side of railroad, 4 feet south of old milepost 259; iron post stamped "532 B 1902"	532.864
Redding courthouse, first angle of wall on north side of east entrance; aluminum tablet stamped "590 B 1902" (C. & G. S. b. m. K–15)	590.753

	Feet
Middle Creek, in front of station; top of rail	522.8
Middle Creek (Waugh post office), 600 feet north of station, 15 feet west of track, at telegraph pole opposite hotel; iron post stamped "521 B 1902" (C. & G. S. b. m. F–15)	522.384
Keswick, in front of station; top of rail	563.9
Keswick, 0.6 mile north of, 100 feet north of milepost 266, 12 feet east of railroad telegraph pole; iron post stamped "569 B 1902" (C–15)	570.507
Copley, 5 feet south of southwest corner of schoolhouse (Flat Creek district); iron post stamped "729 B 1902"	730.576
Copley, at freight house; top of upper rail	596.4
Copley, 3.4 miles north of, 15 feet south of railroad, 150 feet west of old milepost 273; iron post stamped "628 B 1902"	628.714
Kennett, 1.3 miles west of, on east side of railroad, 100 feet south of old milepost 276, at telegraph pole; iron post stamped "654 B 1902" (T–14)	655.202
Kennett, in front of station; top of rail	666.3
Kennett, 1.8 miles north of, on east side of railroad, 300 feet north of old milepost 279, at telegraph pole; iron post stamped "679 B 1902" (Q–14)	679.782
Kennett, 4.8 miles north of, on east side of railroad, 300 feet north of old milepost 282, at telegraph pole; iron post stamped "722 B 1902" (P–14)	723.542
Elmore, 3 feet west of fence west of Schoonover's house, 900 feet east of center of railroad trestle over Sacramento River, 58 feet south of tracks; iron post stamped "789 B 1902" (C. & G. S. b. m. N–14)	789.739
Elmore, in front of station sign; top of rail	796.8
Elmore, 3.7 miles north of, on east side of railroad, 5 feet from milepost 289; iron post stamped "901 B 1902"	902.567
Baird (Gregory post office), railroad crossing at station; top of rail	963.3
Baird, 12 feet south of southeast corner of Smithson School; iron post stamped "1022 B 1902"	1,023.543
Baird, 2.9 miles north of, on east side of railroad, 300 feet north of old milepost 295, at telegraph pole; iron post stamped "1034 B 1902" (C. & G. S. b. m. I–14)	1,035.569
Delta, in front of station; top of rail	1,134.6
Delta, in front of schoolhouse, 3 feet north of center of porch, 100 feet south of Oregon road; iron post stamped "1319 B 1902"	1,320.508
Lamoine, 600 feet south of store, 20 feet south of bridge over stream, on east side of railroad, at telegraph pole; iron post stamped "1236 B 1902"	1,237.691
Lamoine, 2.1 miles north of, on east side of railroad, 8 feet north of old milepost 304; iron post stamped "1320 B 1902"	1,321.546
Primary leveling by L. A. Whereat in 1900	
From Redding via Furnaceville to Ward's ranch on Reed's toll road	
Loomis Corners, west side of Leighton's house, 2 feet south of northeast corner of fence; iron post stamped "550 R"	548.964
Rocky Plains, near center of, 2 miles southwest of Ben Jenkins's house, 15 feet south of road; iron post stamped "1109 R"	1,107.749
Ward's field, 2 feet east and 8 feet south of fence around, south side of Reed's (Redding-Furnaceville) toll road and 12 feet west of fork of private road leading via Eiler's to Oak Run road; iron post stamped "1279 R"	1,277.685

From Enterprise via Palocedro and Bellavista to Fraziers Corners

	Feet
Pacheco School, 20 feet east of road, 2 feet south of southwest corner; iron post stamped "449 R"	447.953
Bellavista, 15 feet north of county road as traveled, 2 feet southwest of southeast corner of fence around superintendent's house; iron post stamped "537 R"	536.036

From Palocedro via Millville and Pawnee to Ward's ranch and Clover Creek Falls on Furnaceville road

Millville School, 2 feet south of southwest corner of building; iron post stamped "513 R"	511.942
Frank Joseph's house, 540 feet northeast of, 6 feet southeast of tamarack road, 1.5 feet from northwest fence corner of the Tom Webb place on the continuation of division line between the Webb and Joseph farms; iron post stamped "977 R"	975.996

From Millville via Shingletown cut-off road to Bear Creek crossing

George Darr's house, 190 feet east of gate, 2 feet north of fence, south side of road, on top of grade going down to Bear Creek; iron post stamped "806 R"	804.653

From Redding via Shasta to Keswick

Shasta, 50 feet northwest of west corner of Empire Hotel, 4 feet south of corner of corral, on northeast side of the main street, and on northwest side of street to Keswick; iron post stamped "1049 R"	1,047.886
Keswick School, 6 feet south of first angle of west face of building; iron post stamped "778 R"	776.897

From Shasta south along road to Centerville (Larkin), thence east to Girvan

Shasta, 2.7 miles south of, on ledge of rock facing south, west side of road, 150 feet south of old shed; aluminum tablet stamped "930 B 05"	930.959
Centerville (Larkin), west side of road, opposite Centerville store; iron post stamped "876 B"	877.459
Centerville, 2.9 miles east of, 80 feet south of road, 300 feet west of house at junction of roads from Redding and Girvan to Centerville, on ledge of sandstone; aluminum tablet stamped "562 B 05"	563.338

From Fraziers Corners via Bear Valley, Copper City, Madison's and Kelley's ranch to Bagley Flat (single spur line)

Houston ranch, 1.6 miles northwest of, on Stillwater road 15 feet south of fork with and 5 feet east of Copper City road, 500 feet south of fork with road to Bass's; iron post stamped "710 R"	708.791
Bear Valley, 0.15 mile southwest of stage station, 180 feet northeast of junction with Bellavista road, 18 feet southeast of road, 2 feet northwest of fence, on top of hill; iron post stamped "945 R"	943.672
Copper City, 25 feet south of schoolhouse, at southeast corner of lot as at present defined by fence; iron post stamped "806 R"	804.877
Squaw Creek, near east side line of T. 34 N., R. 2 W., 300 feet above first crossing, 1.87 miles north of Madison's house, 6 feet east of trail; iron post stamped "1047 R"	1,045.357

	Feet
T. 35 N., R. 2 W., 1.39 miles north of Kelly's house, near east range line, 10 feet west of trail on saddle; iron post stamped "1536 R"	1,534.719
Bagley Flat, 135 feet southwest of cabin, 85 feet southwest of head of spring; iron post stamped "2730 R"	2,728.880

From point on Southern Pacific R. R. up Middle Salt Creek

T. 36 N., R. 4 W., 3.5 feet west of southeast corner of sec. 30, on line between Tps. 35 and 36 N., R. 4 W., Mount Diablo meridian; iron post stamped "1182 R"	1,181.038

Bench marks based upon McCloud River ditch levels, corrected from data furnished by J. R. Rogers, engineer in charge

T. 34 N., R. 4 W., northwest corner of sec. 23, 5 feet southeast of northwest corner of "McCloud River," U. S. Fish Reservation, 30 feet west of county road; iron post stamped "856 R"	854.786
T. 36 N., R. 3 W., south edge of sec. 31, on west bank of McCloud River, near head of Rogers ditch line, and 100 feet west of ditch station 71+50, 146 feet west of 10-inch forked live-oak tree; iron post stamped "1060 R"	1,058.616

Primary leveling by A. B. Searle in 1903

From Kenneth west along road to Balaklala, thence along trail via Spread Eagle mine and saddle of Copley Ridge (0.5 mile east of Sugarloaf mine) to Copley

Balaklala Mining Co.'s office, 20 feet north of north end of, 20 feet south of road, at base of stone wall; iron post stamped "2286 B"	2,286.922
Spread Eagle mine, 0.5 mile northeast of, 5 feet west of trail, at point of ridge; iron post stamped "2757 B"	2,757.924
Forks of Copley-Sugar Loaf and Minnesota-Sheep Springs trails, 10 feet east of, in saddle; iron post stamped "2560 B"	2,561.138

From Boralma along road to tunnel No. 11 of Trinity Copper Co.

Tunnel No. 11, Trinity Copper Co., 2 feet southwest of mouth; iron post stamped "1636 B"	1,637.086

TEHAMA QUADRANGLE

[Latitude 40°–40° 15′; longitude 122°–122° 15′]

TEHAMA COUNTY

Precise leveling by the U. S. Coast and Geodetic Survey in 1920

Southeast along Southern Pacific R. R.

	Feet
Red Bluff, about 1.75 miles north of, on Southern Pacific R. R., at mileage 225.1, 130 feet east of railroad bridge over Dibble Creek, at north end of highway bridge over same creek, west of roadway, in concrete guardrail under iron-pipe railing; brass disk (U. S. C. & G. S. b. m. D–16)	293.175
Red Bluff, at Crittenden St. crossing of Southern Pacific R. R. track, 35 feet east of track, north of roadway, near a telegraph pole; U. S. G. S. iron post stamped "309 B 1902" (U. S. C. & G. S. b. m. E–16)	309.868

	Feet
Red Bluff, on a corner of Walnut St., occupied by a department store, directly under clock tower of building, in curb on side of public drinking fountain that faces diagonally across the street corner; brass disk (U. S. C. & G. S. b. m. F–16)	306.125
Red Bluff, on south side of west end of long concrete causeway that begins about 1,000 feet east of large steel highway bridge over Sacramento River, at foot of Oak St., in curb line over and under iron guardrail, 50 feet from end of causeway and 6 inches above roadway; brass disk (U. S. C. & G. S. b. m. G–16)	276.118
Red Bluff, in courthouse grounds near northwest corner, about 6 feet inside sidewalk on Pine St.; stone post with disk in top (U. S. C. & G. S. b. m. H–16)	303.136
Red Bluff, about 3 miles south of, on Southern Pacific R. R., at mileage 220.5, west of track, on top face of north basalt abutment of bridge 220–B over Red Bank Creek; outlined square (U. S. C. & G. S. b. m. I–16)	287.742
Red Bluff, about 3.5 miles south of, on Southern Pacific R. R., 400 feet north of milepost 220, opposite railroad culvert 220–A, in top face of highway culvert; brass disk (U. S. C. & G. S. b. m. J–16)	294.150
Rawson, on Southern Pacific R. R., at mileage 218.9, near mail box opposite section gang's houses, 65 feet west of track, in top of a highway-survey concrete post; top of copper peg (U. S. C. & G. S. b. m. K–16)	283.845
Rawson, about 1.25 miles south of, on Southern Pacific R. R., at mileage 217.6, 130 feet south of culvert 217–B; U. S. G. S. iron post stamped "226 B 1902" (U. S. C. & G. S. b. m. L–16)	267.119
Rawson, 1.75 miles south of, on Southern Pacific R. R., in concrete north abutment of trestle 217–A; outlined square (U. S. C. & G. S. b. m. M–16)	259.432
Proberta, about 0.25 mile north of, on Southern Pacific R. R., at mileage 216, opposite railroad bridge 216–A, at south end of a concrete highway bridge, in concrete curb under railing, east of roadway and 1 foot above it; brass disk (U. S. C. & G. S. b. m. N–16)	254.452
Gerber, about 0.5 mile north of, on Southern Pacific R. R., at mileage 214.4, 500 feet east of track, at southwest corner of a conspicuous large steel water tank of the Gerber Light & Water Co.; top of most southwesterly bolt holding steel frame to concrete base (U. S. C. & G. S. b. m. O–16)	239.750
Gerber, about 1.25 miles south of, on Southern Pacific R. R., at mileage 212.6, 1,200 feet south of block signals (home and distance combined) 2126 and 2127, west of track, in top face of south end of concrete culvert 212–B; square cut (U. S. C. & G. S. b. m. P–16)	228.887
Tehama, on Southern Pacific R. R., 100 feet south of depot, in angle of two branch lines of railroad which come together from the south at this point, on southeast concrete pier of water tank, 0.5 foot above ground and facing branch line to Chico; brass disk (U. S. C. & G. S. b. m. Q–16)	219.183
Tehama, on Southern Pacific R. R., at mileage 211.6, near old milepost, 450 feet south of depot, east of track, on right of way; U. S. G. S. iron post stamped "213 B 1902" (U. S. C. & G. S. b. m. R–16)	213.999

	Feet
Tehama, about 0.75 mile south of depot, on Southern Pacific R. R., at milepost 211, in north basalt abutment of first crossing of Sacramento River from the south, east of track at north end; square cut (U. S. C. & G. S. b. m. S–16)	222.637
Los Molinos, about 1 mile south of, on Southern Pacific R. R., at mileage 208.6, east of track at old milepost; U. S. G. S. iron post stamped "210 B 1902" (U. S. C. & G. S. b. m. T–16)	211.489

Precise leveling by C. H. Semper in 1903

North along Southern Pacific R. R.

Vina, 5.5 miles north of, on east side of railroad, 4 feet north of old milepost 210; iron post stamped "210 B 1902" (C. & G. S. b. m. T–16)	211.489
Tehama, 450 feet south of station, 4 feet north of old milepost 213, on east side of railroad; iron post stamped "213 B 1902" (C. & G. S. R–16)	213.999
Tehama, in front of station; top of rail	218.3
Tehama, 3 miles north of, on east side of railroad, 3 feet north of old milepost 216; iron post stamped "237 B 1902"	238.512
Proberta, in front of station; top of rail at crossing	252.5
Proberta, 1.7 miles north of, on east side of railroad, 3 feet north of old milepost 219; iron post stamped "266 B 1902" (C. & G. S. b. m. L–16)	267.119
Proberta, 4.7 miles north of station, on east side of railroad, 3 feet north of old milepost 222; iron post stamped "291 B 1902"	290.889
Red Bluff, in front of station; top of rail	304.6
Red Bluff, at Crittington St. crossing, on north edge of road, 35 feet east of track, at old milepost 225; iron post stamped "309 B 1922" (C. & G. S. b. m. E–16)	309.868

Primary leveling by S. E. Blout and E. W. Glafcke in 1903

From Red Bluff south along county road to crossroads 7 miles north of Corning[1]

Red Bluff, 6.5 miles south of, west side of road, 3 feet south of telephone pole; iron post stamped "311 B"	311.202
Red Bluff, 10.5 miles south of, west side of road, 4 feet north of telephone pole; iron post stamped "304 B"	304.249
Tehama, 5.5 miles west of, west side of road, Red Bluff at crossroads, 5 feet north of telephone pole; iron post stamped "308 B"	307.963

From Tehama north through Cone ranch to Red Bluff

Tehama, 4 miles northeast of, 50 feet south of draw, in small bunch of oaks, east side of county road through Cone ranch; iron post stamped "233 B"	234.389
Antelope Creek, 40 feet north of bridge, east side of road; iron post stamped "234 B"	234.967
Cone estate, 0.25 mile north of adobe ranch house, west side of road, south side of Antelope Creek at bridge; iron post stamped "246 B"	247.029
Cone estate, Antelope ranch headquarters, beside walk in front of residence, east side of road; iron post stamped "271 B"	271.764

[1] The error distributed in this line is excessive.

From Mill Creek Highway Bridge east 4 miles up Mill Creek, thence north to Day Creek, thence west to road fork 1 mile north of Antelope ranch

	Feet
T. 26 N., R. 1 W., southeast corner of sec. 31, north of Mill Creek, 10 feet north of road; iron post stamped "471 B"	472.159

From Wild Cat Gulch eastward to T. 26 N., R. 1 W.

Wild Cat Creek, 2 miles east of, north side of road, in highest point of lava boulder; aluminum tablet stamped "1040 B"	1,041.259

From Dry Creek northwest and westward along private roads at base of foothills to Red Bluff

Dry Creek sheep camp, 4 miles north of, 350 feet west of west end of stone fence, 4 feet east of gatepost; iron post stamped "301 B"	301.765

From point 6 miles east of Red Bluff east along Red Bluff and Lyonsville road to Mud Springs

Red Bluff, 6 miles east of, at forks of road to Tuscan Springs, near signpost; iron post stamped "307 B 1903"	307.629
Mud Springs, 0.25 mile west of, 15 feet south of road, in sec. 6, T. 27 N., R. 1 W., in lava boulder, 6 by 4 by 2 feet; aluminum tablet stamped "1061 B"	1,062.406

From Mill Creek south to Toomes Creek, thence southwest to milepost 207

Lone Pine camp, Toomes Creek sheep camp, 200 feet west of ranch house, 4 feet east of telephone pole; iron post stamped "358 B"	359.180

WEAVERVILLE QUADRANGLE

[Latitude 40° 30′–41°; longitude 122° 30′–123°]

SHASTA AND TRINITY COUNTIES

Primary leveling by George C. Jacobs in 1905

From Shasta northwest along road via Stella and Lowden to Weaverville

	Feet
Shasta, 2 miles northwest of, 30 feet northeast of Camden turnpike at Shasta divide, 75 feet east of telephone pole; iron post stamped "1428 B 1905"	1,429.345
Stella post office; center of bridge over Whiskey Creek	1,066.6
Stella, south side of road, opposite hotel; iron post stamped "1091 B 1905"	1,092.031
Oak Bottom, 0.2 mile northwest of, northeast side of Camden turnpike, 6 telephone poles east of Shasta 8-mile post; on ledge of rock facing east; aluminum tablet stamped "1191 B 1905"	1,191.916
Tower House, 0.7 mile southeast of, north side of Camden turnpike, 630 feet northwest of Tower House 1-mile post; aluminum tablet stamped "1318 B 1905"	1,318.641
Tower House, 3.5 miles west of, south side of Shasta and Weaverville turnpike, on large boulder opposite Endicott ranch house; aluminum tablet stamped "1750 B 1905"	1,751.025
Buckhorn station, 4.4 miles east of, south side of road, east end of cut at summit; iron post stamped "3252 B 1905"	3,261.917
Buckhorn, 2.4 miles east of station, east side of road, at culvert, on large boulder; aluminum tablet stamped "2754 B 1905"	2,764.541
Buckhorn, 1.2 miles northwest of station, north side of road, on large boulder; aluminum tablet stamped "2374 B 1905"	2,383.974

	Feet
Lowden, 1.5 miles southeast of, north side of road, in rock; aluminum tablet stamped "2093 B 1905"	2,103.466
Lowden, west side of road in front of hotel; iron post stamped "1754 B 1905"	1,764.500
Lowden, 3.2 miles northwest of, north side of road, 320 feet southeast of Weaverville milepost 6, on rock; aluminum tablet stamped "2710 B 1905"	2,723.304
Weaverville, 2.9 miles south of, 375 feet north of junction of roads from Lowden and Douglas, east side of road, on ledge of rock; aluminum tablet stamped "1816 B 1905"	1,829.647
Weaverville, southeast corner of courthouse, in pavement; aluminum tablet stamped "2034 B 1905"	2,047.869

From Weaverville along road via Junction to Helena

Weaverville, 2.8 miles west of, 0.5 mile east of summit, north side of road, on rock; aluminum tablet stamped "2738 B 1905"	2,751.674

DEGREE QUADRANGLE 40°–41°, 123°–124°

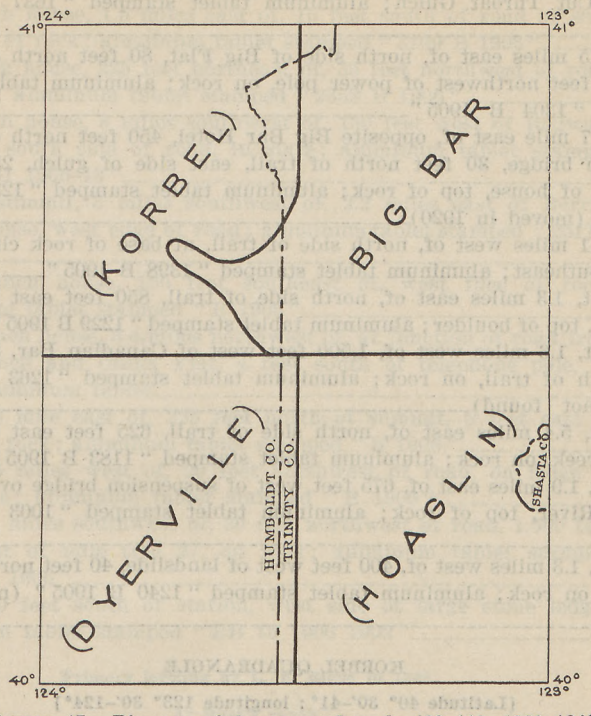


FIGURE 47.—Diagram of degree quadrangle 40°–41°, 123°–124°

BIG BAR QUADRANGLE

[Latitude 40° 30′–41°; longitude 123°–123° 30′]

TRINITY COUNTY

Primary leveling by George C. Jacobs in 1905

Along highway via Junction City to Helena

	Feet
Junction City, 3.9 miles east of, 0.9 mile west of La Grange mine, southwest side of road, in top of stone monument, Mount Diablo meridian; copper plate stamped "2218 B"	2,231.907
Junction City, northwest side of road, 200 feet west of gravel bluff, 200 feet south of church, on large white boulder; aluminum tablet stamped "1478 B 1905"	1,492.026
Junction City, 2.7 miles northwest of, north side of road, 300 feet west of where North Mountain Power Co.'s pipe line crosses road, on ledge of rock; aluminum tablet stamped "1747 B 1905"	1,761.070
Helena, 2.3 miles east of, southeast side of road, northwest bank of Trinity River, on large boulder; aluminum tablet stamped "1410 B 1905"	1,423.594
Helena post office, northeast side of road, 4 feet from south corner of brick store; iron post stamped "1391 B 1905"	1,404.506

From Helena along trail down north side of Trinity River to Luccocks Bar, thence on south side to Don Juan Point, thence on north side to Cedar Flat

	Feet
Helena, 3 miles west of, south side of trail, east side of brook, top of rock in Cut Throat Gulch; aluminum tablet stamped "1637 B 1905"	1,650.862
Big Bar, 3.5 miles east of, north side of Big Flat, 80 feet north of trail, 20 feet northwest of power pole, on rock; aluminum tablet stamped "1304 B 1905"	1,314.460
Big Bar, 0.7 mile east of, opposite Big Bar Hotel, 450 feet north of supension bridge, 30 feet north of trail, east side of gulch, 250 feet east of house, top of rock; aluminum tablet stamped "1238 B 1905" (moved in 1920)	1,246.155
Big Bar, 2.1 miles west of, north side of trail, at base of rock cliff facing southeast; aluminum tablet stamped "1398 B 1905"	1,409.076
Taylor Flat, 1.3 miles east of, north side of trail, 850 feet east of rock cliff, top of boulder; aluminum tablet stamped "1229 B 1905"	1,240.125
Taylor Flat, 1.6 miles west of, 1,500 feet west of Canadian Bar, 80 feet south of trail, on rock; aluminum tablet stamped "1263 B 1905" (not found)	1,273.801
Cedar Flat, 5.4 miles east of, north side of trail, 625 feet east of Vance Creek, on rock; aluminum tablet stamped "1183 B 1905"	1,194.425
Cedar Flat, 1.9 miles east of, 675 feet west of suspension bridge over Trinity River, top of rock; aluminum tablet stamped "1003 B 1905"	1,003.262
Cedar Flat, 1.3 miles west of, 400 feet west of landslide, 40 feet north of trail, on rock; aluminum tablet stamped "1240 B 1905" (not found)	1,250.460

KORBEL QUADRANGLE

[Latitude 40° 30′–41°; longitude 123° 30′–124°]

HUMBOLDT AND TRINITY COUNTIES

Primary leveling by George C. Jacobs and L. F. Biggs in 1905–6

From South Bank to Hawkins Bar, thence via Campbells Bridge to China Flat

	Feet
Burnt ranch, 500 feet west of house, 250 feet south of cemetery, 300 feet southeast of trail, on large boulder; aluminum tablet stamped "1591 B 1905"	1,601.622
Gray, 175 feet north of trail, 500 feet northwest of house, on large boulder; aluminum tablet stamped "777 B 1905"	787.516
Hawkins Bar, 175 feet northwest of barn, 15 feet north of trail, on rock; aluminum tablet stamped "859 B 1905"	869.491
Donahue ranch house, 2.7 miles southeast of, 60 feet west of trail, edge of river, 100 feet west of creek, top of rock; aluminum tablet stamped "519 B 1905"	528.898
Donahue ranch house, 0.6 mile northwest of, 25 feet northwest of trail, 50 feet northwest of log cabin, at junction of South Fork and Trinity River, on rock; aluminum tablet stamped "543 B 1905"	553.385
China Flat, 2.4 miles south of, west side of road, top of rock; alumninum tablet stamped "646 B 1906"	645.195
China Flat, 160 feet north of hotel, 70 feet northeast of road to Hoopa, top of rock; aluminum tablet stamped "451 B 1906"	461.149
China Flat, 2.8 miles north of, south side of road, first summit, large rock; aluminum tablet stamped "BB 1906 20"	644.210

From China Flat along road via Acorn to Korbel

	Feet
China Flat, 2.8 miles west of, 50 feet east of road, 25 feet south of Little Brannen Creek, 200 feet northeast of Koby ranch house, top of rock; aluminum tablet stamped "1459 B 1906"	1,469.422
Haas ranch house, 1.5 miles east of, 15 feet south of road at summit, top of rock; aluminum tablet stamped "3109 B 1906"	3,118.616
Haas ranch house, 225 feet northeast of, 35 feet northwest of road, on rock; aluminum tablet stamped "2352 B 1906"	2,362.617
Haas ranch house, 3 miles southwest of, 150 feet west of Redwood summit, south side of road, in slate; aluminum tablet stamped "BB 3701 1906–13"	3,714.927
Redwood summit, 3 miles southwest of, 2.2 miles east of Berry's ranch house, west edge of road; aluminum tablet stamped "2517 B 1906"	2,530.941
Berry's ranch house, 100 feet southeast of, west face of rock; aluminum tablet stamped "B 1906"	1,037.563
Berry's ranch house, 3.4 miles northwest of, at junction of road from Baer ranch and China Flat, 4 feet south of telephone pole, on rock; aluminum tablet	2,423.727
Solano, 0.6 mile east of, 225 feet north of summit, 5 feet east of road, on rock; aluminum tablet stamped "B 1906"	3,079.729
Solano, 1.5 miles west of, 20 feet northwest of road, on ledge of sandstone; aluminum tablet stamped "B 1906"	2,483.452
Solano, 4.1 miles southwest of, 30 feet northwest of road, 1,500 feet southwest of mile tree 27, on rock; aluminum tablet stamped "1949 B 1906"	1,962.590
Korbel, 100 feet south of station, west side of large stone ledge; aluminum tablet stamped "BB 15 1906 1902"	115.673

Primary leveling by L. F. Biggs in 1906

At Baer's ranch

Baer's ranch, 0.8 mile east of, 20 feet south of trail, in very large boulder known as "14-mile rock"; aluminum tablet stamped "B 29 1359 1906"	1,358.118
Baer's ranch house, 1,000 feet southwest of, southwest corner of bridge, top of pier; aluminum tablet stamped "B 30 1906 732"	731.773

DEGREE QUADRANGLE 40°–41°, 124°–125°

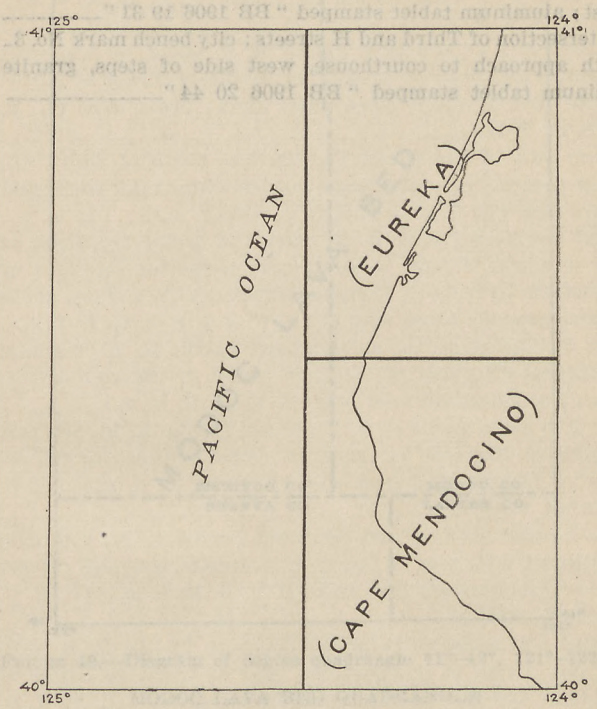


FIGURE 48.—Diagram of degree quadrangle 40°–41°, 124°–125°

EUREKA QUADRANGLE

[Latitude 40° 30′–41°; longitude 124°–124° 30′]

HUMBOLDT COUNTY

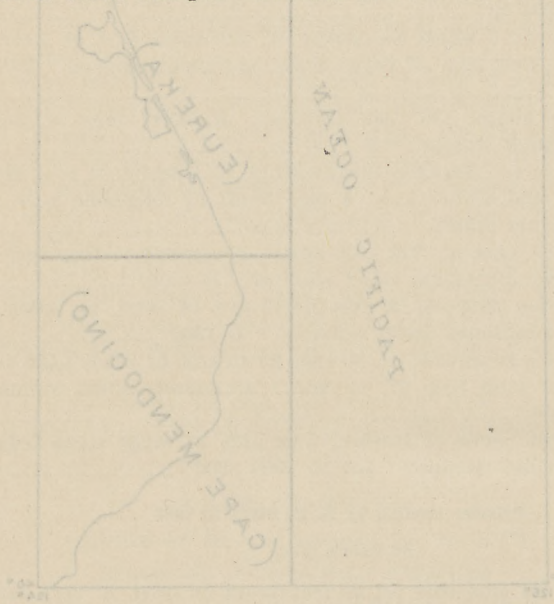
Primary leveling by L. F. Biggs in 1906

From Korbel along Arcata & Mad River R. R. to Arcata

	Feet
Blue Lake station, in front of; top of rail	87.8
Korbel, 1.7 miles southwest of, 0.6 mile west of Blue Lake, north side of railroad, large boulder; aluminum tablet stamped "BB 16 1906 72"	85.726
Korbel, 6.2 miles west of, 3.6 miles east of Arcata, 300 feet south of Webster ranch house, south side of track, large boulder; aluminum tablet stamped "33.17 1906 58"	72.202
Arcata, southeast corner of Eighth and H streets, northwest corner of brick building 25 by 100 feet; aluminum tablet stamped "BB 18 1906 27"	27.109

From Arcata along Northwestern Pacific R. R. to Eureka

	Feet
Bayside station, in front of; top of east rail	7.793
Northeast corner of Pacific Steamship Co.'s warehouse; nail in floor	8.273
Eureka, at intersection of Third and E streets; city bench mark No. 2	12.445
Eureka City Hall, east approach to, north side of steps, in top of granite post; aluminum tablet stamped "BB 1906 19 31"	30.934
Eureka, at intersection of Third and H streets; city bench mark No. 3	32.633
Eureka, north approach to courthouse, west side of steps, granite post; aluminum tablet stamped "BB 1906 20 44"	44.059



DEGREE QUADRANGLE 41°–42°, 121°–122°

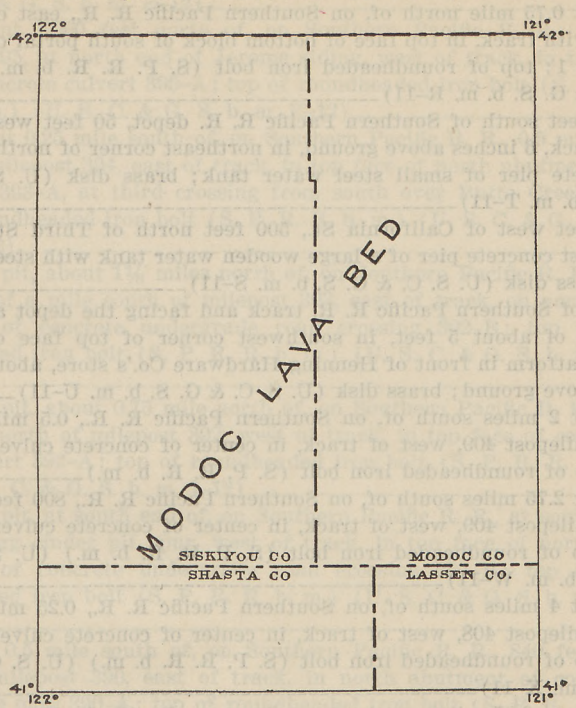


FIGURE 49.—Diagram of degree quadrangle 41°–42°, 121°–122°

MODOC LAVA BED QUADRANGLE

[Latitude 41°–42°; longitude 121°–122°]

LASSEN, MODOC, SHASTA, AND SISKIYOU COUNTIES

Precise leveling by the U. S. Coast and Geodetic Survey in 1920

South along Southern Pacific R. R.

	Feet
Calor, about 1 mile south of, on Southern Pacific R. R., 0.5 mile north of north end of tunnel No. 2, 0.5 mile north of milepost 415, east of track, in concrete undergrade crossing 415–B of a public road; top of roundheaded iron bolt (Southern Pacific R. R. b. m.) (U. S. C. & G. S. b. m. N–11)	4,203.883
Dorris, about 3 miles north of, on Southern Pacific R. R., one-third of a mile south of milepost 415, at south portal of tunnel No. 2, west of and level with track, on top face of bottom granite block; top of roundheaded iron bolt (S. P. R. R. b. m.) (U. S. C. & G. S. b. m. O–11)	4,217.803
Dorris, about 2 miles north of, on Southern Pacific R. R., 600 feet south of milepost 414, east of track, in concrete culvert 413 B; top of roundheaded iron bolt (S. P. R. R. b. m.) (U. S. C. & G. S. b. m. P–11)	4,224.552

Feet

Dorris, about 1 mile north of, on Southern Pacific R. R., west of and level with track, in top face of bottom block of north portal of tunnel No. 1; top of roundheaded iron bolt (S. P. R. R. b. m.) (U. S. C. & G. S. b. m. Q–11) 4,244.450

Dorris, about 0.75 mile north of, on Southern Pacific R. R., east of and level with track, in top face of bottom block of south portal of tunnel No. 1; top of roundheaded iron bolt (S. P. R. R. b. m.) (U. S. C. & G. S. b. m. R–11) 4,246.081

Dorris, 100 feet south of Southern Pacific R. R. depot, 50 feet west of main track, 6 inches above ground, in northeast corner of northeast concrete pier of small steel water tank; brass disk (U. S. C. & G. S. b. m. T–11) 4,238.495

Dorris, 50 feet west of California St., 500 feet north of Third St., in southwest concrete pier of a large wooden water tank with steel frame; brass disk (U. S. C. & G. S. b. m. S–11) 4,239.991

Dorris, east of Southern Pacific R. R. track and facing the depot at a distance of about 5 feet, in southwest corner of top face of concrete platform in front of Henning Hardware Co.'s store, about 3½ feet above ground; brass disk (U. S. C. & G. S. b. m. U–11) 4,242.764

Dorris, about 2 miles south of, on Southern Pacific R. R., 0.5 mile north of milepost 409, west of track, in center of concrete culvert 409–A; top of roundheaded iron bolt (S. P. R. R. b. m.) 4,235.349

Dorris, about 2.75 miles south of, on Southern Pacific R. R., 800 feet south of milepost 409, west of track, in center of concrete culvert 408–A; top of roundheaded iron bolt (S. P. R. R. b. m.) (U. S. C. & G. S. b. m. W–11) 4,235.933

Dorris, about 4 miles south of, on Southern Pacific R. R., 0.25 mile south of milepost 408, west of track, in center of concrete culvert 407–A; top of roundheaded iron bolt (S. P. R. R. b. m.) (U. S. C. & G. S. b. m. X–11) 4,235.520

Somerset, about 3.25 miles north of, on Southern Pacific R. R., one-third of a mile north of milepost 406, east of track, in center of concrete culvert 406–A; top of roundheaded iron bolt (S. P. R. R. b. m.) (U. S. C. & G. S. b. m. Y–11) 4,235.470

Macdoel, about 1 mile north of, on Southern Pacific R. R., one-third of a mile north of milepost 402, west of track, in center of concrete culvert 402–C; top of roundheaded iron bolt (S. P. R. R. b. m.) (U. S. C. & G. S. b. m. Z–11) 4,242.354

Macdoel, 200 feet northwest of Southern Pacific R. R. depot, 200 feet west of and facing main track, on Montezuma Ave., in foundation of Messick & Sons' general store, where coating of tin gives the appearance of red brick, 30 feet north of curb line and 1 foot above ground; brass disk (U. S. C. & G. S. b. m, A–12) 4,263.102

Mount Hebron, about 540 feet north of depot, on Southern Pacific R. R., east of track, in top of top block of stone irrigation canal culvert 398–B; top of roundheaded bolt (S. P. R. R. b. m.) (U. S. C. & G. S. b. m. B–12) 4,258.321

Mount Hebron, on Southern Pacific R. R., at milepost 398, 2 feet above ground, in north concrete pier of large, conspicuous steel water tank, east of and close to track; brass disk (U. S. C. & G. S. b. m. C–12) 4,261.179

Mount Hebron, about 1.75 miles south of, on Southern Pacific R. R., 0.25 mile north of milepost 397, east of track, on north side of concrete cattle pass 397–B, in top face; top of roundheaded bolt (S. P. R. R. b. m.) (U. S. C. & G. S. b. m. D–12) 4,266.018

Feet

Mount Hebron, 2.75 miles south of, on Southern Pacific R. R., 200 feet south of milepost 396, west of track, in top face of concrete culvert 395–D; top of roundheaded iron bolt (S. P. R. R. b. m.) (U. S. C. & G. S. b. m. E–12) ---------- 4,295.037

Jerome, about 1,000 feet north of, on Southern Pacific R. R., at milepost 395, at north end of Jerome siding, west of track, in top face of concrete culvert 395–A; top of roundheaded iron bolt (S. P. R. R. b. m.) (U. S. C. & G. S. b. m. F–12) ---------- 4,318.791

Jerome, about 0.25 mile south of, on Southern Pacific R. R., 0.5 mile south of milepost 394, east of track, in top face of north abutment of bridge 393–A, at third crossing from south over Butte Creek; top of roundheaded iron bolt (S. P. R. R. b. m.) (U. S. C. & G. S. b. m. G–12) ---------- 4,358.479

Kegg cinder pit, about 1⅓ miles north of, on Southern Pacific R. R., one-third of a mile south of milepost 393, east of track, on north abutment of concrete undergrade road crossing 392–B; top of roundheaded iron bolt (S. P. R. R. b. m.) (U. S. C. & G. S. b. m. H–12) ---------- 4,387.983

Kegg cinder pit, about 0.75 mile north of, on Southern Pacific R. R., 0.25 mile north of milepost 392, west of track, in top face of concrete culvert 392–A; top of roundheaded iron bolt (S. P. R. R. b. m.) (U. S. C. & G. S. b. m. I–12) ---------- 4,396.536

Kegg cinder pit, at south end of, on Southern Pacific R. R., at south end of Kegg cinder pit spur, west of track, in top face of north abutment of concrete undergrade road crossing 391–B; top of roundheaded iron bolt (S. P. R. R. b. m.) (U. S. C. & G. S. b. m. J–12) ---------- 4,432.393

Kegg, about 0.5 mile south of, on Southern Pacific R. R., 840 feet north of milepost 390, east of track, in north abutment of concrete cattle pass 390–A; top of roundheaded iron bolt (S. P. R. R. b. m.) (U. S. C. & G. S. b. m. K–12) ---------- 4,488.078

Bray, about 1.5 miles north of, on Southern Pacific R. R., 100 feet north of milepost 388, east of track, on north abutment of concrete culvert 388–A 3 feet below the top; top of railroad spike in horizontal surface (S. P. R. R. b. m.) (U. S. C. & G. S. b. m. L–12) -- 4,590.404

Bray, about 0.5 mile north of depot, on Southern Pacific R. R., east of track, in top face of north stone abutment of bridge over Butte Creek, at second crossing from south, at end of steel plate girder; top of railroad spike (S. P. R. R. b. m.) (U. S. C. & G. S. b. m. M–12) ---------- 4,642.858

Bray, 100 feet south of Southern Pacific R. R. depot, 100 feet west of track, in southeast concrete pier of small galvanized steel water tank; brass disk (U. S. C. & G. S. b. m. N–12) ---------- 4,643.534

Bray, about 1 mile southwest of, on Southern Pacific R. R., 0.25 mile south of milepost 396, west of track, in top face of south abutment of concrete undergrade road crossing 385–C; top of roundheaded iron bolt (S. P. R. R. b. m.) (U. S. C. & G. S. b. m. O–12) ---------- 4,652.120

Bray, about 2 miles west of, on Southern Pacific R. R., one-third of a mile south of milepost 385, west of and level with track, in concrete top of south stone abutment of bridge over Butte Creek, at first crossing; top of railroad spike (S. P. R. R. b. m.) (U. S. C. & G. S. b. m. P–12) ---------- 4,682.671

DEGREE QUADRANGLE 41°–42°, 122°–123°

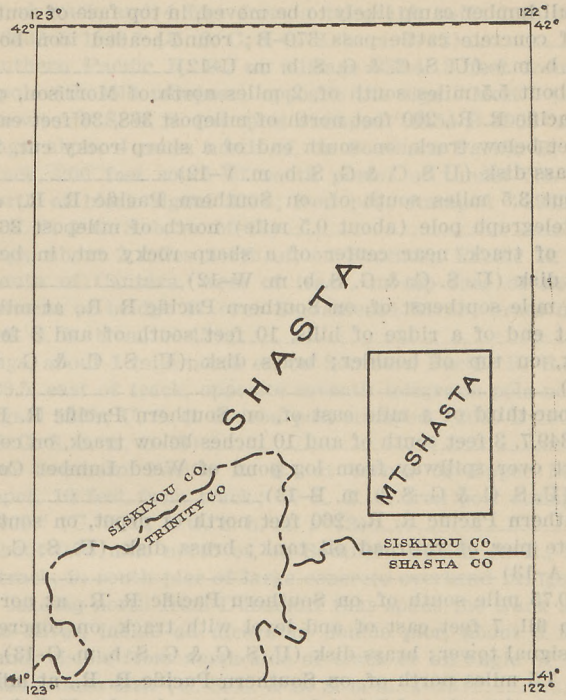


FIGURE 50.—Diagram of degree quadrangle 41°–42°, 122°–123°

SHASTA QUADRANGLE

[Latitude 41°–42°; longitude 122°–123°]

SHASTA, SISKIYOU, AND TRINITY COUNTIES

Precise leveling by the U. S. Coast and Geodetic Survey in 1920

South along Southern Pacific R. R.

	Feet
Penoyar, about one-third of a mile north of, on Southern Pacific R. R., at north end of Penoyar siding, one-third of a mile north of signboard "Penoyar" and west of track, in north abutment of concrete cattle pass 382–A; top of railroad spike (S. P. R. R. b. m.) (U. S. C. & G. S. b. m. Q–12)	4,790.243
Grass Lake, about 1.5 miles north of, on Southern Pacific R. R. 3 feet east of track, in south end of concrete culvert (cattle pass) 374–C; top of round-headed iron bolt (S. P. R. R. b. m.) (U. S. C. & G. S. b. m. R–12)	5,058.205
Grass Lake, about 0.5 mile north of, on Southern Pacific R. R., on top surface of south end of concrete culvert 375–D; top of round-headed iron bolt (S. P. R. R. b. m.) (U. S. C. & G. S. b.. m. S–12)	5,057.588

	Feet
Grass Lake, about 0.25 mile south of depot, on Southern Pacific R. R., at milepost 373, east of track, in top face of concrete pier nearest the track of a large water tank, about 1.5 feet above ground; brass disk (U. S. C. & G. S. b. m. T–12)	5,065.423
Grass Lake, about 0.5 mile south of, on Southern Pacific R. R., at Paula, a small lumber camp likely to be moved, in top face of south abutment of concrete cattle pass 370–B; round-headed iron bolt (S. P. R. R. b. m.) (U. S. C. & G. S. b. m. U–12)	4,945.502
Grass Lake, about 5.5 miles south of, 2 miles north of Morrison, on Southern Pacific R. R., 200 feet north of milepost 368, 36 feet east of and 3 feet below track, on south end of a sharp rocky cut, in bedrock; brass disk (U S. C. & G. S. b. m. V–12)	4,664.617
Morrison, about 3.5 miles south of, on Southern Pacific R. R., at nineteenth telegraph pole (about 0.5 mile) north of milepost 362, 7 feet east of track, near center of a sharp rocky cut, in bedrock; brass disk (U. S. C. & G. S. b. m. W–12)	3,971.741
Hoey, about 1 mile southeast of, on Southern Pacific R. R., at mileage 357.4, at end of a ridge of hills, 10 feet south of and 3 feet above track, on top of boulder; brass disk (U. S. C. & G. S. b. m. Y–12)	3,471.486
Weed, about one-third of a mile east of, on Southern Pacific R. R., at mileage 349.7, 3 feet south of and 10 inches below track, on concrete culvert over spillway from log pond of Weed Lumber Co.; brass disk (U. S. C. & G. S. b. m. B–13)	3,519.324
Weed, on Southern Pacific R. R., 260 feet north of depot, on southeast concrete pier of railroad oil tank; brass disk (U. S. C. & G. S. b. m. A–13)	3,465.856
Weed, about 0.75 mile south of, on Southern Pacific R. R., at north end of deep fill, 7 feet east of and level with track, on concrete base of old signal tower; brass disk (U. S. C. & G. S. b. m. C–13)	3,520.951
Igerna, about 1.5 miles north of, on Southern Pacific R. R., at mileage 347.3, west of track and 5 feet from a telegraph pole; U. S. G. S. iron post stamped "3568 B 1902"	3,568.598
Dietz, about one-third of a mile south of, on Southern Pacific R. R., at south end of Dietz siding, 10 feet west of and level with track, on top surface of concrete base of "West board home signal"; brass disk (U. S. C. & G. S. b. m. D–13)	3,795.370
Sisson, 1 mile north of, on Southern Pacific R. R., 50 feet north of point of Sisson siding, 30 feet north of a public-road crossing, west of track, on south side of and under the ladder of the concrete block signal stand 3375; brass disk (U. S. C. & G. S. b. m. F–13)	3,613.280
Sisson, about 0.5 mile north of, on Southern Pacific R. R., at mileage 337.4, north of road crossing, east of track, near Standard Oil Co.'s warehouses, 4 feet from telegraph pole; iron post of U. S. G. S. stamped "3596 B 1902" (U. S. C. & G. S. b. m. L–13)	3,596.883
Sisson, in front face of the Southern Pacific R. R. depot, directly under center window of ticket office facing tracks, about 6 inches above ground; brass disk (U. S. C. & G. S. b. m. G–13)	3,554.287
Sisson, in front of Park Hotel, at corner of Walnut and Alma streets, on second step leading to sidewalk and directly on corner curve; brass disk (U. S. C. & G. S. b. m. M–13)	3,558.028
Sisson, on north side of Jessie St., in first block east of Walnut St., on concrete base of flagpole in front of U. S. Forest Service building; brass disk (U. S. C. & G. S. b. m. I–13)	3,566.863

Feet

Sisson, about 1.75 miles south of, on Southern Pacific R. R., 100 feet south of milepost 335, 7 feet east of track, on base of concrete block signal stand 3350, under ladder on north side; brass disk (U. S. C. & G. S. b. m. E–13) 3,438.979

Mott, about 2.75 miles north of, on Southern Pacific R. R. at mileage 334.4, east of track and 4 feet from a telegraph pole; iron post stamped "3392 B 1902" (U. S. C. & G. S. b. m. J–13) 3,393.225

Mott, on Southern Pacific R. R., at mileage 331.4, 3 feet from a telegraph pole (the old milepost) opposite the sign "Mott" (station here now); U. S. G. S. iron post stamped "3154 B 1902" 3,154.695

Shasta Springs, about 4 miles north of, on Southern Pacific R. R., east of track, 200 feet south of south portal of tunnel No. 12, 20 feet north of block signal 3224; iron post stamped "3942 B 1902" (U. S. C. & G. S. b. m. M–13) 2,943.439

Shasta Springs, about 2 miles north of, on Southern Pacific R. R., 0.5 mile south of Cantara, west of track, in top face of north basalt abutment of bridge 17 over Sacramento River; brass disk (U. S. C. & G. S. b. m. N–13) 2,739.447

Shasta Springs, about 1 mile north of, on Southern Pacific R. R., at mileage 326.5, east of track, opposite seventh telegraph pole north of block signal 3265; U. S. G. S. iron post stamped "2650 B 1902" (U. S. C. & G. S. b. m. O–13) 2,651.648

Dunsmuir, on Southern Pacific R. R., at corner of Upper Soda Springs depot, 10 feet from track; U. S. G. S. iron post stamped "2355 B 1902" (U. S. C. & G. S. b. m. P–13) 2,356.636

Dunsmuir, about 0.75 mile north of, on Southern Pacific R. R., 130 feet from track, in south pier of large concrete overhead bridge of a highway leading north from Dunsmuir that spans the track and Sacramento River, inside an alcove in double pier, about 6 feet above ground, visible from north side of track at an angle of 45° to bridge line; brass disk (U. S. C. & G. S. b. m. T–13) 2,337.269

Dunsmuir, 130 feet north of Southern Pacific R. R. blacksmith shop, 4 feet above ground, on northwest concrete pier of the north one of two large steel oil tanks standing close together; brass disk (U. S. C. & G. S. b. m. Q–13) 2,289.169

Dunsmuir, 100 feet south of Southern Pacific R. R. depot, 30 feet southeast of ornamental water fountain facing main track at a distance of 10 feet, 4 feet above ground, in face of retaining-wall foundation of a small building; brass disk (U. S. C. & G. S. b. m. R–13) 2,286.052

Dunsmuir, on Pine St. just west of Sacramento St., facing ornamental fountain just south of Southern Pacific R. R. depot, in concrete face of Dunsmuir State Bank, south of entrance and about 1 foot above sidewalk; brass disk (U. S. C. & G. S. b. m. S–13) 2,307.508

Castle Crag, about 2 miles north of, on Southern Pacific R. R., at mileage 320.3, 1,000 feet south of sign "Nut Glade," east of track and 7 feet north of a telegraph pole; U. S. G. S. iron post stamped "2,186 B 1902" (U. S. C. & G. S. b. m. U–13) 2,187.522

Castle Crag, about 1.75 miles north of, on Southern Pacific R. R., at mileage 319.95, west of and 1.5 feet below track, in top face of basalt abutment of culvert 319–I; brass disk (U. S. C. & G. S. b. m. V–13) 2,168.860

	Feet
Castle Crags, about 1 mile south of, on Southern Pacific R. R., at mileage 317.4, near a telegraph pole, on bank of a cut, opposite the sign "Dirigo, one mile"; iron post of U. S. G. S. stamped "2056 B 1902" (U. S. C. & G. S. b. m. W–13)	2,057.342
Dirigo, about 500 feet south of, on Southern Pacific R. R., 100 feet north of milepost 316, east of track, in top face at south end of concrete culvert 316–A; brass disk (U. S. C. & G. S. b. m. X–13)	1,978.385
Castella, about 1 mile south of, on Southern Pacific R. R., near Sweet Brier station, at mileage 317.4, 40 feet south of culvert 314–F, east of track near a telegraph pole; U. S. G. S. iron post stamped "1900 B 1902" (U. S. C. & G. S. b. m. Y–13)	1,901.272
Flume, about one-third of a mile south of, on Southern Pacific R. R., at mileage 311.5, 25 feet south of culvert 311–F, east of track and 5 feet north of a telegraph pole; iron post of U. S. G. S. stamped "1779 B 1902" (U. S. C. & G. S. b. m. Z–13)	1,780.587
Sims, about 1.25 miles north of, on Southern Pacific R. R., at mileage 310.6, just north of tunnel 11, on east side of top basalt block of north abutment of bridge 13 over Sacramento River; rounded knob in center of square cut (U. S. C. & G. S. b. m. A–14)	1,738.973
Sims, about 1 mile north of, on Southern Pacific R. R., at mileage 310.4, just south of tunnel 11, east of track, on top of top block of basalt stone abutment at south end of bridge at twelfth Southern Pacific R. R. crossing over Sacramento River from the south; rounded knob in square cut (U. S. C. & G. S. b. m. B–14)	1,724.002
Sims, about 1 mile south of, on Southern Pacific R. R., at mileage 308.4, near culvert 308–E, beside track, near a telegraph pole; iron post of U. S. G. S. stamped "1607 B 1902" (U. S. C. & G. S. b. m. G–14)	1,608.563
Sims, about 2.75 miles south of, on Southern Pacific R. R., at mileage 306.6, in top face of basalt rock on west side of north abutment of bridge 306–D, forming ninth crossing over Sacramento River from the south; rounded knob in square cut (U. S. C. & G. S. b. m. D–14)	1,530.227
Lamoine, about 5 miles north of, on Southern Pacific R R., 300 feet south of bridge 8 over Sacramento River, east of track, 10 feet north of a telegraph pole; U. S. G. S. iron post stamped "1449 B 1902" (U. S. C. & G. S. b. m. E–14)	1,450.706
Lamoine, about 2 miles north of, on Southern Pacific R. R., 7 feet west of and 3 feet below track, on north masonry abutment of seventh crossing over Sacramento River from the south; brass disk (U. S. C. & G. S. b. m. F–14)	1,318.711
Lamoine, about 2 miles north of, on Southern Pacific R. R., east of track, 8 feet north of milepost 304; U. S. G. S. iron post stamped "1320 B 1902" (U. S. C. & G. S. b. m. 1320–B)	1,321.546

Precise leveling by the U. S. Coast and Geodetic Survey in 1920

From Weed north along Southern Pacific R. R. to California-Oregon State line

Weed, 3 miles north of, 90 meters north of railroad structure, 3 meters west of center line of track, level with track; red metal disk (U. S. C. & G. S. b. m. D–34)	3,163.675

	Feet
Weed, 1.8 miles north of, on east side of railroad, 2 feet from old milepost 352; U. S. G. S. iron post stamped "3,255 B 1902" (U. S. C. & G. S. b. m.)	3,256.608
Edgewood, 600 feet south of station, on east side of railroad, at old milepost 355, 20 meters north of turntable, 20 meters east of center line of track; U. S. G. S. iron post stamped "2957 B 1902" (U. S. C. & G. S. b. m. E–34)	2,958.019
Edgewood, on southwest abutment of several concrete piers of south tank of two water tanks 200 feet south of station, 20 meters east of center line of track; surface within an outlined square on horizontal masonry (U. S. C. & G. S. b. m. 5a)	2,952.277
Edgewood, 0.2 mile north of, on north end of east abutment of first crossing of Little Shasta River, 4 meters east of center line of track, 0.4 meter below track; red metal disk (U. S. C. & G. S. b. m. F–34)	2,942.720
Edgewood, 2.8 miles north of, 40 meters north of culvert 356–B, 20 meters east of center line of track, 5 feet north of old milepost 358; U. S. G. S. iron post stamped "2902 B 1902" (U. S. C. & G. S. b. m. G–34)	2,910.142
Gazelle, 1 mile south of, 225 meters north of milepost 360, smallest of two large rocks, one nearest Southern Pacific fence line, 30 meters east of center line of track; surface within an outlined square on masonry (U. S. C. & G. S. b. m. H–34)	2,798.413
Gazelle, 1.3 miles north of, 15 meters east of center line of track, 3 feet from old milepost 364, 540 meters north of milepost 362; U. S. G. S. iron post stamped "2717 B 1902" (U. S. C. & G. S. b. m. I–34)	2,718.259
Gazelle, 4.8 miles north of, on concrete work of irrigation pipe crossing Southern Pacific right of way, culvert 364–C, 500 meters south of milepost 365, 6 meters east of center line of track; red metal disk (U. S. C. & G. S. b. m. J–34)	2,648.587
Gazelle, 10.3 miles north of, on east side of railroad, at old milepost 373, 200 meters north of railroad structure 371A; U. S. G. S. iron post stamped "2524 B 1902" (U. S. C. & G. S. b. m. K–34)	2,525.169
Montague, 1.7 miles south of, railroad mileage 373.8, 10 meters southeast of railroad culvert 373–M, 10 meters east of center line of track, on outcropping rock; surface within an outlined square on masonry (U. S. C. & G. S. b. m. L–34)	2,488.312
Montague, 1.0 mile south of, on east side of railroad, opposite culvert 374B, railroad mileage 374.4, second telephone pole north of old milepost 376; U. S. G. S. iron post stamped "2,518 B 1902" (U. S. C. & G. S. b. m. N–34)	2,518.860
Montague, on northeast corner of Montague Hotel on Eleventh and Webb streets, on Webb St. side, in vertical wall, 3 feet above sidewalk; U. S. G. S. aluminum plate stamped "2538 B" (U. S. C. & G. S. b. m. O–34)	2,537.649
Montague, 14 feet from corner of Ninth St. on Webb St., in vertical wall of concrete building owned by W. R. Parshall & Son, east of Southern Pacific station; red metal disk (U. S. C. & G. S. b. m. M–34)	2,549.283

	Feet
Montague, 1.2 miles north of, opposite private-road crossing 376–F, 40 meters west of center line of track, railroad mileage 376.6, in center rock on east side of pile of rocks; red metal disk (U. S. C. & G. S. b. m. P–34)	2,549.240
Snowden, 2,000 feet south of, railroad mileage 380.3, 100 feet southeast of culvert 380–C, 4 feet from fence line, 20 meters east of center line of track; U. S. G. S. iron post stamped "2658 B 1902" (U. S. C. & G. S. b. m. R–34)	2,659.027
Montague, 7.7 miles north of, railroad mileage 383.5, on east side of railroad, at first telephone pole south of old milepost 385; U. S. G. S. iron post stamped "2544 B 1903" (U. S. C. & G. S. b. m. S–34)	2,544.769
Ager, 1.2 miles south of, brass plate set in rock, 3 feet from fence line, 300 feet north of public-road crossing, opposite milepost 385, 10 meters east of center line of track; red metal disk (U. S. C. & G. S. b. m. U–34)	2,402.269
Ager, 800 feet north of station, railroad mileage 386.3, 70 feet from end of blind switch, on east side of railroad at old milepost 388; U. S. G. S. iron post stamped "2322 B 1903" (U. S. C. & G. S. b. m. V–34)	2,323.736
Ager, 0.8 mile north of, railroad mileage 387.0, 10 meters east of center line of track, just beyond second cut north of Ager, in rock; red metal disk (U. S. C. & G. S. b. m. W–34)	2,274.274
Ager, 3 miles north of, railroad mileage 389.4, 4 meters west of center line of track, opposite sign "Klamath 1 mile," at old milepost 391; U. S. G. S. iron post stamped "2115 B 1903" (U. S. C. & G. S. b. m. X–34)	2,115.967
Hornbrook, 2.2 miles south of, railroad mileage 390.3, in southwest abutment of wagon-road bridge across Klamath River, 25 meters east of center line of track; brass plate (U. S. C. & G. S. b. m. Y–34)	2,112.079
Hornbrook, 0.8 mile south of, railroad mileage 392.3, 40 meters south of yard-limit sign, 5 meters west of center line of track, 200 feet south of old milepost 394, at fence line; U. S. G. S. iron post stamped "2114 B 1903"	2,115.370
Hornbrook, on curbing at southeast corner of Hotel Hornbrook, 9 inches from southeast post of porch of main entrance; red metal disk (U. S. C. & G. S. b. m. A–35)	2,154.189
Hornbrook, 2.8 miles north of, railroad mileage 395.9, in east end of highway culvert, 15 meters west of center line of track, opposite railroad culvert 395G; brass plate (U. S. C. & G. S. b. m. B–35)	2,382.902
Hornbrook, 4.4 miles north of, railroad mileage 397.5, 20 meters south of Zuleka station, 6 meters west of center line of track, on largest of several rocks; surface within an outlined square (U. S. C. & G. S. b. m. C–35)	2,650.602

Precise leveling by C. H. Semper in 1903

North along Southern Pacific R. R.

Sims, in front of station; top of rail	1,670.5
Castella, in front of station; top of rail	1,944.0
Castle Crag, in front of station; top of rail	2,092.1
Dunsmuir, in front of station; top of rail	2,284.3
Shasta Springs, in front of station; top of rail	2,539.1

	Feet
Mott, in front of station; top of rail	3,154.0
Sisson, in front of station; top of rail	3,552.9
Upton, in front of station; top of rail	3,703.9
Upton, 2.3 miles north of, on east side of railroad, 8 feet from old milepost 343; iron post stamped "3791 B 1902"	3,791.933
Upton, 5.4 miles north of, on east side of railroad, 10 feet from old milepost 346; iron post stamped "3879 B 1902"	3,879.813
Igerna, in front of station; top of rail	3,732.6
Igerna, 1.6 miles north of, on west side of railroad, opposite old milepost 349, 5 feet from telegraph pole; iron post stamped "3568 B 1902" Z 12	3,568.631
Edgewood, in front of station; top of rail	2,950.0
Edgewood, 5.8 miles north of, on east side of railroad, 2 feet from old milepost 361; iron post stamped "2824 B 1902"	2,825.403
Gazelle, in front of station; top of rail	2,756.9
Gazelle, 4.3 miles north of, on east side of railroad, at old milepost 367; iron post stamped "2625 B 1902"	2,626.212
Gazelle, 7.2 miles north of, on east side of railroad, at old milepost 370; iron post stamped "2554 B 1902"	2,555.433
Montague, in front of station; top of rail	2,538.7
Montague, 1.8 miles north of, on east side of railroad, at old milepost 379; iron post stamped "2563 B 1902"	2,563.876
Ager, in front of station; top of rail	2,331.0
Hornbrook, in front of station; top of rail	2,151.7
Hornbrook, 2.2 miles north of, on east side of railroad, 30 feet north of old milepost 397, at fence line; iron post stamped "2306 B 1903"	2,306.975
Hornbrook, 5.1 miles north of, on west side of railroad, 240 feet south of old milepost 400, at telegraph pole; iron post stamped "2786 B 1903"	2,786.767
Hornbrook, 8.2 miles north of, on west side of railroad, at telegraph pole, opposite old milepost 403; iron post stamped "2897 B 1903"	2,898.176
Cole, in front of station; top of rail	2,863.0

SHASTA VALLEY

Primary leveling by C. W. H. Nessler in 1921

From Gazelle along highways east 3.5 miles, thence southeast 6.1 miles, thence west to bench mark 2.8 miles north of Edgewood

	Feet
Gazelle, 1.3 miles north of, on east side of railroad, 3 feet from milepost 364; iron post stamped "2,717 B 1902" (Bull. 342, p. 28, +0.162). Elevation established by U. S. Coast and Geodetic Survey in 1920	2,718.259
Gazelle, 3 miles northeast of, on Gazelle-Big Spring Road, in base of south gate post; spike, "U. S. 2,672 B. M." painted on post	2,671.70
Gazelle, 3.5 miles northeast of, 200 feet west of crossing of Gazelle-Big Spring and Grenada-Edgewood roads, at south edge of road, in large lava boulder; bronze tablet stamped "2, 713 4 1921"	2,713.368
Edgewood, 5.2 miles north of, on Grenada-Edgewood road, at T road east, in base of gatepost; spike, "U. S. 2,673 B. M." painted on post	2,673.50
Edgewood, 3.5 miles north of, on west side of Grenada-Edgewood road, in base of fence post; spike, "U. S. 2,685 B. M." painted on post	2,685.22

	Feet
Edgewood, 2.8 miles north of, at southwest corner of small wooden bridge; white circle painted on point of an iron brace clamp, "U. S. 2,713 B. M." painted on brace timber	2,712.61
Edgewood, 2.2 miles north of, 200 feet east of junction of Grenada-Edgewood and Edgewood-Big Spring roads, about 700 feet west of Cedar Park School, on south side of road, in large lava boulder; bronze tablet stamped "2,856–8–1921"	2,855.829

From point 3.5 miles east of Gazelle along highways northeast to Big Spring, thence north 2.5 miles, thence west to point near Grenada

Gazelle, 4.8 miles northeast of, on east side of Gazelle-Big Spring road, in base of fence post; spike, "U. S. 2,671 B. M." painted on post	2,671.03
Gazelle, 5.8 miles northeast of, on south side of Gazelle-Big Spring road, in base of post; spike, "U. S. 2,665 B. M." painted on post	2,665.19
Gazelle, 7.2 miles northeast of, 300 feet west of bridge over Shasta River, on south side of Gazelle-Big Spring road, in large lava boulder; bronze tablet stamped "2,585 5 1921"	2,585.130
Big Spring, 1 mile southwest of, on south side of Gazelle-Big Spring road, in top of juniper stump; spike, "U. S. 2,603 B. M." painted on stump	2,602.88
Big Spring, 1,200 feet south of, 100 feet north of junction of cross-roads, 8 feet west of power line, on east side of road, in a lava reef; bronze tablet stamped "2,613 6 1921"	2,612.619
Big Spring, 1 mile north of, at right-angle bend in road, in base of power pole; spike, "U. S. 2,625 B. M." painted on pole	2,624.70
Big Spring, 1.8 miles north of, on east side of road, at T roads east, in base of power pole; spike, "U. S. 2,637 B. M." painted on pole	2,637.54
Big Spring, 2.5 miles north of, about 1,000 feet west of crossroads, in southwest corner of cement steps at Big Spring School; bronze tablet stamped "2,638–7–1921"	2,638.670
Grenada, 6 miles east of, on north side of road, in base of last power pole; spike, "U. S. 2,629 B. M." painted on pole	2,629.33
Grenada, 5 miles east of, in northwest corner of T road north; white circle painted on point of lava rock, "2,606" painted on rock	2,606.47
Grenada, 4 miles east of, 90 feet east of road, at southwest corner of Salt Lake, about 150 feet north of artesian well, in a lava reef; bronze tablet stamped "2,588–9–1921"	2,587.840
Grenada, 3 miles east of, on north side of road, in base of gatepost; spike, "U. S. 2,567 B. M." painted on post	2,567.25
Grenada, 2 miles east of, on north side of road, in base of fence post, on field side; spike, "U. S. 2,521 B. M." painted on post	2,520.85
Grenada, 1.2 miles east of, at east end of steel bridge over Shasta River, in northeast end of stone and cement abutment; bronze tablet stamped "2, 518 10 1921"	2,518.450

From Big Spring along highways south and southwest to point 2.2 miles north of Edgewood

Big Spring, 1.3 miles south of, on west side of road, in base of power pole; spike, "U. S. 2,633 B. M." painted on pole	2,633.24
Big Spring, 2.5 miles south of, on east side of road, in base of power pole; spike, "U. S. 2,665 B. M." painted on pole	2,664.58

	Feet
Big Spring, 3.5 miles south of, on west side of road, opposite Dunlap's ranch, in large granite boulder; bronze tablet stamped "2,734 17 1921"	2,733.649
Big Spring, 4.5 miles south of, 1,500 feet south of Shasta View School, on west side of road, in base of 8-inch juniper tree; spike, "U. S. 2,756 B. M." painted on tree	2,756.29
Big Spring, 5.7 miles south of, on east side of road, in base of 10-inch juniper tree; spike, "U. S. 2,814 B. M." painted on tree	2,815.16
Big Spring, 7.3 miles south of, 75 feet west of junction of Big Spring-Edgewood and Big Spring-Weed roads, on south side of road, in large granite boulder; bronze tablet stamped "2,826 18 1921"	2,826.774
Cedar Park School, 2.6 miles east of, 1,000 feet east of Smith ranch house, on north side of road, in base of gatepost; spike, "U. S. 2,792 B. M." painted on post	2,793.10
Cedar Park School, 1.6 miles east of, on south side of road, in base of gatepost; spike, "U. S. 2,843 B. M." painted on post	2,843.53
Cedar Park School, 0.9 mile east of, on northwest pile of a steel bridge over Shasta River; bolthead painted white, "U. S. 2,837 B. M." painted on steel plate	2,737.53

From point 2.5 miles north of Big Spring along highways northwest and west to Montague

Big Spring School, 0.9 mile north of, on east side of road, in base of end power pole; spike, "U. S. 2,654 B. M." painted on pole	2,654.17
Big Spring School, 2 miles north of, on east side of road, in corner fence post; spike, "U. S. 2,696 B. M." painted on post	2,696.56
Big Spring School, 2.7 miles north of, about 1.5 miles east of Drop triangulation station, on north edge of Big Spring-Montague road, in a large boulder; bronze tablet stamped "2,661 11 1921"	2,661.010
Big Spring School, 3.4 miles north of, about 500 feet west of a large lake, at a private road west, in base of north gatepost; spike, "U. S. 2,662 B. M." painted on post	2,661.80
Big Spring School, 4.7 miles north of, at T road west, on east side of road, in base of gatepost; spike, "U. S. 2,673 B. M." painted on post	2,672.90
Big Spring School, 5.8 miles north of, on east side of road, in corner fence post; spike, "U. S. 2,663 B. M." painted on post	2,662.76
Big Spring School, 5.8 miles north of, 50 feet west of Big Spring-Montague road, 20 feet east of a large outcropping rock, in a large lava boulder; bronze tablet stamped "2,666 12 1921"	2,666.329
Big Spring School, 6.5 miles north of, in a saddle, on east edge of road; white circle painted on large granite boulder, "U. S. 2,672 B. M." painted on boulder	2,671.78
Montague, 5 miles east of, at road forks east, in base of gatepost; spike, "U. S. 2,609 B. M." painted on post	2,609.40
Montague, 3.9 miles east of, at forks of Montague-Dorris and Montague-Big Spring roads, 12 feet north of road corner, at end of rock fence, in large lava boulder; bronze tablet stamped "2,613 13 1921"	2,613.625
Montague, 3 miles east of, on south side of road, in base of power pole; spike, "U. S. 2,587 B. M." painted on pole	2,587.37

	Feet
Montague, 2 miles east of, on south side of road, in base of power pole; spike, "U. S. 2,621 B. M." painted on pole	2,621.00
Montague, 1 mile east of, on south side of road, in base of power pole; spike, "U. S. 2,614 B. M." painted on pole	2,613.80

From point 3.9 miles east of Montague along highways east 3.2 miles, thence southeast to Delaney

Montague, about 5 miles east of, on north side of Dorris road, at a bend northeast, in base of power pole; spike, "U. S. 2,654 B. M." painted on pole	2,654.14
Montague, about 6 miles east of, on north side of Dorris road, in base of power pole; spike, "U. S. 2,698 B. M." painted on pole	2,698.41
Montague, about 7 miles east of, 280 feet east of T road north, in large granite boulder, on north side of Dorris road; bronze tablet stamped "2,730 14 1921"	2,729.826
Little Shasta post office, about 1 mile south of, at T road, opposite Little Shasta School, in base of power pole; spike, "U. S. 2,705 B. M." painted on pole	2,704.97
Little Shasta post office, about 2 miles south of, on east side of road, in base of power pole; spike, "U. S. 2,756 B. M." painted on pole	2,755.58
Little Shasta post office, about 3 miles south of, 0.25 mile north of T road east, on east side of road, 3 feet inside of fence, in large granite boulder; bronze tablet stamped "2,747 19 1921," "U. S. B. M." painted on fence	2,747.277
Little Shasta post office, about 4 miles south of, on east side of road, in base of power pole; spike, "U. S. 2,736 B. M." painted on pole	2,736.37
Little Shasta post office, about 5.3 miles south of, on west side of road, in top of square redwood post; nail, "U. S. 2,781 B. M." painted on post	2,780.84
Little Shasta post office, about 6 miles south of, 1,800 feet east of right-angled bend in road east, on south side of road, under fence, in large lava boulder; bronze tablet stamped "2,814 22 1921"	2,813.773
Little Shasta post office, about 7 miles south of, on east side of road, in base of fence post; spike, "U. S. 2,893 B. M." painted on post	2,892.64
Little Shasta post office, about 8 miles south of, 400 feet north of Conrad ranch, on west side of road, on lava boulder; chiseled point, "U. S. 2,995 B. M." painted on boulder	2,994.97
Delaney, 5.7 miles northwest of, 0.75 mile south of Conrad ranch, 40 feet east of road, in large lava boulder; bronze tablet stamped "3,021 23 1921"	3,020.840
Delaney, 4.7 miles northwest of, on north side of road, on lava boulder; chiseled square, "U. S. 3,051 B. M." painted on boulder	3,051.43
Delaney, 4 miles northwest of, at T road west, in big juniper fence post; spike, "U. S. 3,060 B. M." painted on fence	3,060.56
Delaney, 3.0 miles northwest of, 80 feet west of road, 150 feet north of deserted ranch house, in large lava boulder; bronze tablet stamped "3,192 24 1921"	3,192.048
Delaney, 2.0 miles northwest of, 30 feet west of road; chiseled square on lava boulder, "U. S. 3,323 B. M." painted on boulder	3,322.73
Delaney, 1.1 miles north of, on west edge of road, in base of 10-inch juniper tree; spike, "U. S. 3,529 B. M." painted on tree	3,529.54
Delaney, a station on the Weed to Klamath Falls railroad, opposite station, 60 feet north of track, in sandstone boulder; bronze tablet stamped "3,669 25 1921"	3,668.624

	Feet
Morrison, about 3.5 miles south of, on Southern Pacific R. R., at 19th telegraph pole north of milepost 362, 2 meters east of track, near center of a sharp rocky cut, in bedrock; brass disk (U. S. C. & G. S. b. m. W–12)	3,971.741
From point 7 miles east of Montague along highways east 1.7 miles, thence north and west to point 4.8 miles north of Montague	
Montague, 8.7 miles east of, about 0.25 mile southeast of Little Shasta post office, 1,300 feet south of road junction, in northeast end of concrete bridge over Little Shasta River; bronze tablet stamped "2,796 15 1921"	2,796.418
Little Shasta post office, about 1 mile north of, on west side of Willow Creek road, in base of big fence post north of gate; spike, "U. S. 2,948 B. M." painted on post	2,948.09
Little Shasta post office, about 2 miles north of, 1,100 feet north of Hovey Gulch School, in base of power pole; spike, "U. S. 3,130 B. M." painted on pole	3,130.17
Little Shasta post office, about 3.4 miles north of, 250 feet north of T road west, on east side of Willow Creek road, 2 feet from fence, in a lava boulder; bronze tablet stamped "3,581 16 1921"	3,580.734
Little Shasta post office, about 4.4 miles north of, on west side of Willow Creek road, in base of power pole; "U. S. 3,317 B. M." painted on pole	3,317.39
Little Shasta post office, 4.9 miles north of, 20 feet west of Willow Creek road, in base of power pole; "U. S. 3,119 B. M." painted on pole	3,118.28
Snowden, 5.6 miles east of, 1,400 feet east of Foothill School, 20 feet north of road, in a grain field, in country rock; bronze tablet stamped "3,004 20 1921"	3,004.250
Snowden, 4.4 miles east of, on north side of road, in base of fence post; spike, "U. S. 2,873 B. M." painted on post	2,873.09
Snowden, 3.1 miles east of, at right-angled bend in road west, in base of fence post; spike, "U. S. 2,702 B. M." painted on post	2,701.68
Snowden, 2 miles east of, at northeast corner of T road east, in large lava boulder; bronze tablet stamped "2,656 21 1921"	2,655.627
Montague, 4.8 miles north of, on east side of railroad, at first telegraph pole north of milepost 382; iron post stamped "2,658 B 1902" (Bull. 342,+0.137). Elevation established by U. S. Coast and Geodetic Survey in 1920	2,659.027
From Grenada along highways west and north to Yreka	
Gazelle, 7.2 miles north of, on east side of railroad, at milepost 370; iron post stamped "2,554 B 1902"	2,555.433
Grenada, opposite station; top of west main-line rail	2,558.3
Grenada, 1 mile west of, at junction of T road and State highway, in base of telegraph pole; spike, "U. S. 2,621 B. M." painted on pole	2,621.04
Grenada, 2.0 miles northwest of, on south side of State highway, 1,100 feet west of Vineland School, at Charles Orr's ranch, in west end of concrete fence; bronze tablet stamped "2,683 1 1921"	2,682.732
Grenada, 3.1 miles northwest of, on north side of State highway, in base of telegraph pole; spike, "U. S. 2,736 B. M." painted on pole	2,736.13

	Feet
Grenada, 4.1 miles northwest of, on north side of State highway, in base of telegraph pole; spike, "U. S. 2,813 B. M." painted on pole	2, 812. 83
Grenada, 5.5 miles northwest of, on north side of State highway, in southeast corner of T road north, in large sandstone boulder set 2 feet in ground; bronze tablet stamped "2,882 2 1921"	2, 881. 818
Grenada, 6.5 miles northwest of, on north side of State highway, 20 feet north of right of way fence, in base of telephone pole; spike, "U. S. 2,838 B. M." painted on pole	2, 838. 48
Yreka, 3.1 miles south of, on east side of State highway, in base of telephone pole; spike, "U. S. 2,770 B. M." painted on pole	2, 770. 15
Yreka, 2 miles south of, 1,000 feet south of junction of Scott Valley road and State highway, about 900 feet south of Greenhorn School, in northeast end of small concrete bridge; bronze tablet stamped "2,701 3 1921"	2, 700. 634
Yreka, 0.75 mile south of, 280 feet south of T road east, on east side of State highway, in base of power pole; spike, "U. S. 2,664 B. M." painted on pole	2, 663. 66
Yreka, courthouse and jail, in cement foundation of northeast corner of jail; aluminum tablet stamped "B. B. 1907 3 2,625" (Bull. 481 value)	2, 624. 886

SHASTA VALLEY IRRIGATION PROJECT

Primary leveling by R. A. Kiger in 1922

From Ager northeast along highways to Reclamation bench mark 2.9 miles west of Beswick

	Feet
Ager, 800 feet north of station, mileage 386.3, 70 feet from end of blind switch, on east side of railroad, at old milepost 388; iron post stamped "2,322 B 1903" (Bull. 342, p. 28, corrected to final U. S. C. & G. S. value in 1924)	2, 323. 736
Ager, 1 mile northeast of, in south end of plank culvert under old road, on north side of new road; copper nail and washer	2, 497. 912
Ager, 2 miles northeast of, at angle in road 250 feet south of summit, 35 feet east of center of road, in telephone pole; railroad spike	2, 787. 788
Floor of small bridge; head of nail	2, 667. 0
Ager, 2.9 miles northeast of, 70 feet north of center of road, just west of small ravine, in top of 3 by 5 foot lava boulder 2½ feet high; aluminum tablet	2, 612. 976
Ager, 4 miles northeast of, 300 feet west of schoolhouse, in side of 18-inch juniper stump, at south edge of road; spike	2, 589. 162
Ager, 5 miles northeast of, at junction of long east and west fence, near point where telephone line leaves road on south side of road, in base of large corner fence post; railroad spike	2, 631. 136
Ager, 6.2 miles northeast of, on north side and 8 feet from center of road, 3 feet above road, in ledge of lava rock; bronze tablet not stamped	2, 694. 959
Ager, 7.2 miles northeast of, at private road to north, 750 feet east of bridge over Little Bogus Creek, in base of west gate post; spike	2, 540. 620
Ager, 7.9 miles northeast of, in southeast corner of wooden truss bridge over Bogus Creek; steel nail with copper washer	2, 563. 972
Ager, 8.9 miles northeast of, 10 feet west of center of road and 5 feet above it, in lava boulder 3 by 2 feet and 2 feet high; bronze tablet not stamped	2, 796. 118

	Feet
Ager, 9.9 miles northeast of, on rock at junction of private road south; chiseled mark	2,891.882
Ager, 11.2 miles northeast of, at point where road crosses summit of ridge, 33 feet south of center of road and 8 feet south of fence, in base of 6-inch oak tree; railroad spike	3,141.215
Ager, 11.8 miles northeast of, 20 feet north of center of road, 10 feet above road, in lava boulder 6 by 3 by 3 feet; bronze tablet	2,864.009
Ager, 12.9 miles northeast of, 8 feet north of center of road, in base of 14-inch oak tree; railroad spike	2,638.303
Ager, 14.4 miles northeast of, 10 feet south of center of road, 175 feet east of gate at entrance to field between road and river, in base of 15-inch oak tree; railroad spike	2,626.285
Beswick, 2.9 miles west of, 140 feet west of apis of Otter bridge, on south side of river, 40 feet south of Ager road and 17 feet above it, in 4 by 5 foot lava rock faced by three blazed trees. (Elevation 2,638.035 by Reclamation Service (?). No record in Washington office, apparent closure error 0.911 foot.)	2,636.744

Primary leveling by L. F. Biggs in 1907

From point 6 miles northeast of Etna Mills southwest to Etna Mills, thence north

Etna Mills, 3.3 miles northeast of, 16 feet north of road, in boulder; aluminum tablet stamped "B 1907 10 2778"	2,775.356
Etna Mills, 2.2 miles east of, at southwest corner of bridge over Scott River, in floor above pier; spike stamped "B," aluminum tag stamped "B 30 2791"	2,786.89
Etna Mills, 2.2 miles east of, Scott River, under bridge; surface of water, June 14, 1907	2,776
Etna Mills, northeast corner of Blake's hotel, in brick wall; aluminum tablet stamped "B 1907 11 2933"	2,930.372
Etna Mills, center of Denny Bar Co.'s store, in front brick wall; aluminum tablet stamped "B 1907 12 2945"	2,942.072
Greenview, 2.4 miles south of, west of road, 25 feet south of Washington district school, in base of pine tree 36 inches in diameter; nail with aluminum tag stamped "B 193 2816"	2,816.49

From Etna Mills southwest to Snowden

Etna Mills, 2 miles southwest of, at forks of road to mill, in base of pine tree 24 inches in diameter; spike with aluminum tag stamped "B 33 3122"	3,117.98
Etna Mills, 3 miles southwest of, north of road, in flat rock; aluminum tablet stamped "B 1907 13 3443"	3,439.800
Etna Mills, 5 miles southwest of, 6 feet north of road, in base of pine tree 36 inches in diameter; spike with aluminum tag stamped "B 35 3864"	3,861.70
Etna Mills, 5.8 miles southwest of, east of road, in granite rock; aluminum tablet stamped "B 1907 14 4243"	4,244.170
Etna Mills, 7.7 miles southwest of, 300 feet north of bridge, 20 feet east of road, in base of fir tree 24 inches in diameter; spike with aluminum tag stamped "B 37 5156"	5,151.25
Etna Mills, 9.4 miles southwest of, 20 feet east of road, at summit between Etna Mills and Sawyer Bar, in slate ledge; aluminum tablet stamped "B 1907 15 5969"	5,965.470

Primary leveling by L. F. Biggs in 1907

From Montague west along road via Yreka and Forest House to Fort Jones

	Feet
Montague, 1 mile south of, east of railroad, second telegraph pole north of old milepost 376; iron post stamped "2518 B 1902" (C. & G. S. b. m. N–34)	2,518.860
Montague, 1.5 feet west of northeast corner of Montague Hotel; aluminum tablet stamped "B B 1907 2538"	2,537.649
Montague, 1.7 miles west of, at northwest corner of Shasta River bridge, 2 feet above abutment, 1 foot below aluminum tag; bolthead with aluminum tag stamped "B 2 2455"	2,455.07
Yreka, high school, in stone foundation of left pillar of east approach; aluminum tablet stamped "B B 1907 2 2616"	2,615.926
Yreka, courthouse and jail, in cement foundation of northeast corner of jail; aluminum tablet stamped "B B 1907 3 2625"	2,624.886
Yreka, 4.6 miles southwest of, 0.2 mile east of Forest House, 10 feet north of road, in cut slate ledge; aluminum tablet stamped "B B 1907 4 3056	3,056.010
Summit of divide between Yreka and Fort Jones, 400 feet east of, north edge of road, in slate boulder 3 by 3 by 3 feet; aluminum tablet stamped "B B 1907 5 4117"	4,117.440
Summit of divide between Yreka and Fort Jones, 20 feet south of road, in base of 36-inch pine tree; spike with aluminum tag stamped "B 13 4159"	4,159.41
Fort Jones, 8 miles northeast of, 6 feet west of road, 6 feet north of creek, in base of 14-inch alder tree; spike, aluminum tag stamped "B 15 3411"	3,411.55
Fort Jones, 6.8 miles northeast of, 6 feet east of road, in base of pine tree 42 inches in diameter; spike with aluminum tag stamped "B 16 3178"	3,178.83
Fort Jones, 5.5 miles northeast of, 6 feet north of road, at rocky point, in slate ledge; aluminum tablet stamped "B B 1907 6 2935"	2,936.120
Fort Jones, 4.4 miles northeast of, 250 feet north of schoolhouse, 15 feet north of road, in base of oak tree 36 inches in diameter; spike with aluminum tag stamped "B 17 2916"	2,916.82
Fort Jones, 3.2 miles northeast of, 6 feet south of road, in boulder; aluminum tablet stamped "B B 1907 2829"	2,829.300
Fort Jones, 1 mile northeast of, 40 feet east of forks of road leading north, in base of 36-inch pine tree; spike with aluminum tag stamped "B 20 2771"	2,771.00
Fort Jones, in northwest corner of Berm's brick building used as livery stable; aluminum tablet stamped "B 1907 8 2747"	2,747.365

From Yreka west and south via Mount Vernon mine house to Fort Jones

Yreka, 4.3 miles west of, south of road, 25 feet north of ditch at point of rocks, in large boulder; aluminum tablet stamped "B B 1907 72 3107"	3,107.296
Yreka, 7.5 miles west of, north of road at summit, 500 feet west of Mount Vernon mine house, in ledge; aluminum tablet stamped "B B 1907 73 4435"	4,435.593
Yreka, 10.1 miles west of, north of road, 500 feet east of De Silva ranch, in base of 24-inch pine tree; nail with aluminum tag stamped "B 223 3475"	3,475.10
Yreka, 11.9 miles west of, north of road at Hi U Gulch, in large boulder; aluminum tablet stamped "74 B B 1907 3215"	3,215.090

Feet

Fort Jones, 4.5 miles northeast of, north of road, 250 feet west of old shack, in base of 14-inch pine tree; nail with aluminum tag stamped "B 224 3017" ---------- 3,016.83

Fort Jones, 4 miles northeast of, 300 feet west of Dan's ranch house, north of road, at foot of pine tree, in rock ledge; aluminum tablet stamped "B B 1907 75 2932" ---------- 2,934.460

From Fort Jones southwest 7 miles (part of line to Etna Mills)

Fort Jones, 1 mile southwest of, 20 feet east of lane, in base of pine tree 48 inches in diameter; spike with aluminum tag stamped "B 21 2736" ---------- 2,736.05

Fort Jones, 3 miles southwest of, 50 feet east of road, in base of pine tree 48 inches in diamter; spike with aluminum tag stamped "B 23 2746" ---------- 2,744.64

Fort Jones, 4 miles southwest of, 20 feet east of road, in base of oak tree 36 inches in diameter; spike with aluminum tag stamped "B 24 2758" ---------- 2,756.87

Fort Jones, 6.5 miles southwest of, 7.8 miles north of Etna, northwest corner of schoolhouse, in corner stone; aluminum tablet stamped "B 1907 9 2756" ---------- 2,754.800

Etna Mills, 6 miles northeast of, 30 feet west of road, in base of pine tree 24 inches in diameter; spike with aluminum tag stamped "B 26 2808" ---------- 2,804.20

From Fort Jones southwest 7 miles (part of line to Etna Mills)

Fort Jones, 1.1 miles south of bridge over Scott River, above southwest pier; top of bolt with aluminum tag stamped "B 188 2722" ---------- 2,722.10

Fort Jones, 2.7 miles south of, 30 feet north of big gate in rail fence, east of road, in base of pine tree 36 inches in diameter; nail with aluminum tag stamped "B 189 2735" ---------- 2,735.73

Fort Jones, 4.7 miles south of, 125 feet east of Kitten Creek School, east of road, in base of oak tree 30 inches in diameter; nail with aluminum tag stamped "B 191 2768" ---------- 2,768.06

Greenview, in center of front wall of Denny Bar Co.'s store; aluminum tablet stamped "B B 1907 64 2812" ---------- 2,812.000

Greenview, 1.2 miles south of, west of road, 25 feet west of corner of rail fence, in base of pine tree 24 inches in diameter; nail with aluminum tag stamped "B 192 2803" ---------- 2,803.28

From point 12.8 miles northwest of Fort Jones southeast 4.6 miles

Fort Jones, 10.3 miles northwest of, north of road, on large boulder; chisel point painted "U. S. 179 2737" (possibly 3 feet or 6 feet too low) ---------- 2,736.22

Fort Jones, 8.2 miles northwest of, north of road, 1,000 feet east of Pinkerton's ranch, in rock ledge; aluminum tablet stamped "B B 1907 63 2655 (possibly 3 feet or 6 feet too low) ---------- 2,653.896

From Fort Jones northwest to point 1.7 miles west of Meamber School

Fort Jones, 3.4 miles west of, north of road, opposite house, in base of 36-inch oak tree; nail with aluminum tag stamped "B 185 2721" ---------- 2,720.53

Fort Jones, 5.7 miles west of, north of road, at bend, 1,000 feet north of house, in base of pine tree 60 inches in diameter; nail with aluminum tag stamped "B 183 2726" ---------- 2,725.60

Mouth of Scott River, 5 miles east of, at southeast corner of bridge over Klamath River, top of pier; aluminum tag stamped "B 198 1608" ---------- 1,610.48

From mouth of Scott River east to Hornbrook

	Feet
Oak Bar, 1 mile south of, west of road, in base of pine tree 30 inches in diameter; nail with aluminum tag stamped "B 200 1635"	1,637.17
Oak Bar; surface of water, September, 1907	1,630.00
Oak Bar, 500 feet east of hotel, north of road, in large boulder; aluminum tablet stamped "B B 1907 66 1660"	1,662.384
Oak Bar, 1.5 miles east of, west of road, in base of madrone tree 30 inches in diameter; nail with aluminum tag stamped "B 202 1683"	1,685.31
Oak Bar, 3.3 miles east of, south of road, at Quigley's Ferry, in base of 30-inch pine tree; nail with aluminum tag stamped "B 204 1699"	1,700.62
Walker, 1,000 feet west of post office, 10 feet east of road, in boulder; aluminum tablet stamped "B B 1907 67 1722"	1,724.255
Walker, 100 feet east of post office, in base of oak tree 60 inches in diameter; nail with aluminum tag stamped "B 205 1704"	1,706.27
Walker, 2.5 miles east of, south of road, in base of pine tree 24 inches in diameter; nail with aluminum tag stamped "B 207 1729"	1,730.81
Walker, 3.8 miles east of, north of road, in base of oak tree 40 inches in diameter; nail with aluminum tag stamped "1758"	1,759.96
Walker, 5.2 miles east of, south of road at bend, 10 feet east of dry bed of creek, in large boulder; aluminum tablet stamped "B B 1907 1810"	1,812.225
Gottville, south bank of Klamath River at bend of road, in rock ledge; aluminum tablet stamped "B B 1907 69 1882"	1,907.161
Gottville, 2 miles east of, 6 miles east of ferry landing, west of road, in base of oak tree 30 inches in diameter; nail with aluminum tag stamped "B 212 1858"	1,882.73
Gottville, 3.1 miles east of, south of road at bluff over river, in ledge of rock; aluminum tablet stamped "B B 1907 70 1951"	1,975.740
Gottville, 5.3 miles east of, 1,000 feet east of junction of roads to Yreka and Hornbrook, north of road, in base of pine tree 20 inches in diameter; nail, aluminum tag stamped "B 214 1948"	1,950.96
Gottville, 6.7 miles east of, north of road, in base of oak tree 10 inches in diameter; nail, aluminum tag stamped "B 215 1963"	1,965.46
Gottville, 8.6 miles east of, steel bridge across Klamath River, in floor; nail	2,003.00
Gottville, 8.6 miles east of, 25 feet north of bridge over Klamath River, west of road, in rock ledge; aluminum tablet stamped "B B 1907 71 2003"	2,004.557
Gottville, 10 miles east of, south of road, in base of oak tree 40 inches in diameter; nail with aluminum tag stamped "B 216 2014"	2,015.85
Mouth of Shasta River; water surface, Oct. 2, 1907	2,010.6
Hornbrook, 4.3 miles west of, south of road, in base of oak tree 10 inches in diameter; nail with aluminum tag stamped "B 217 2044"	2,045.65
Hornbrook, 3 miles west of, north of road at junction of road and river trail, in large boulder; aluminum tablet stamped "B B 1907 72 2069"	2,071.447
Hornbrook, Klamath River at, under swinging bridge; surface of water Oct. 3, 1907	2,059.00
Hornbrook, 0.8 mile south of, west of railroad, 200 feet south of mile-post 394, at fence line; iron post stamped "B 2114 1903"	2,115.298
Hornbrook, 2.2 miles north of, east of railroad, 30 feet north of mile-post 397, at fence line; iron post stamped "2306 B 1903"	2,306.975

DEGREE QUADRANGLE 41°–42°, 123°–124°

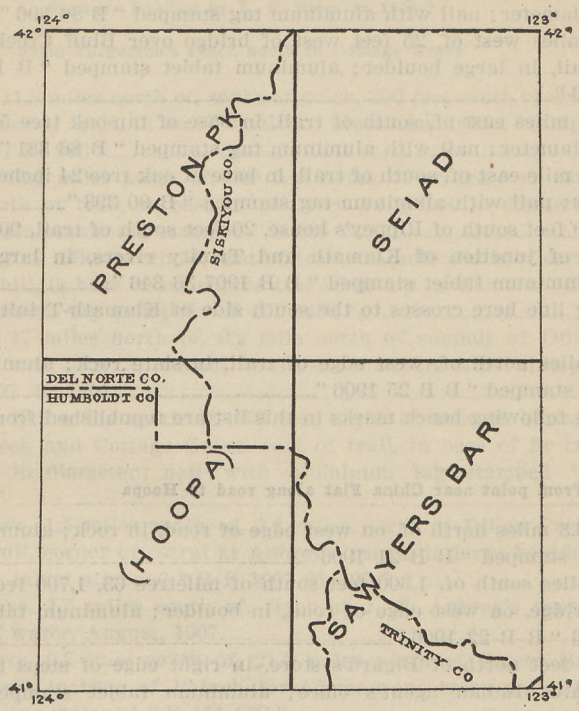


FIGURE 51.—Diagram of degree quadrangle 41°–42°, 123°–124°

HOOPA QUADRANGLE

[Latitude 41°–41° 30′; longitude 123° 30′–124°]

DEL NORTE, HUMBOLDT, AND SISKIYOU COUNTIES

Primary leveling by L. F. Biggs in 1906–7

From Somes Bar southwest down Salmon River to Witchpec

	Feet
Somes Bar, 3.2 miles west of, north of trail at edge of bluff over Klamath River, in base of oak tree 12 inches in diameter; nail with aluminum tag stamped "B 76 809"	830.73
Orleans, 2.6 miles east of, 500 feet east of Reise's house, west of trail, in large boulder; aluminum tablet stamped "B B 1907 32 869"	889.820
Orleans, 1 mile east of, 25 feet east of blacksmith shop at Perche's ranch, north of trail, in base of madrone tree 24 inches in diameter; nail with aluminum tag stamped "B 79 537"	558.28
Orleans, 0.5 mile east of, north of trail, 100 feet east of ford, in large boulder; aluminum tablet stamped "B B 1907 33 372"	392.901

NOTE.—The line crosses here to the north side of Klamath River.

	Feet
Orleans, 2.3 miles west of, south of trail, in base of madrone tree 6 inches in diameter; nail with aluminum tag stamped "B 81 422"	443.16
Orleans, 5.5 miles west of, north of trail, in boulder; aluminum tablet stamped "B B 1907 34 674"	694.887
Orleans, 8.6 miles west of, south of trail, in base of madrone tree 30 inches in diameter; nail with aluminum tag stamped "B 86 396"	417.68
Orleans, 10 miles west of, 25 feet west of bridge over Bluff Creek, west of trail, in large boulder; aluminum tablet stamped "B B 1907 35 326"	346.760
Witchpec, 3.5 miles east of, south of trail, in base of tan-oak tree 56 inches in diameter; nail with aluminum tag stamped "B 86 381"	402.02
Witchpec, 0.9 mile east of, south of trail, in base of oak tree 24 inches in diameter; nail with aluminum tag stamped "B 90 393"	414.16
Witchpec, 250 feet south of Rippey's house, 20 feet south of trail, 900 feet north of junction of Klamath and Trinity rivers, in large boulder; aluminum tablet stamped "B B 1907 36 346"	366.950
NOTE.—The line here crosses to the south side of Klamath-Trinity River.	
Hoopa, 7.5 miles north of, west edge of trail, in slate rock; aluminum tablet stamped "B B 25 1906"	1,006.208
NOTE.—The following bench marks in this list are republished from Bulletin 342.	
From point near China Flat along road to Hoopa	
China Flat, 6.3 miles north of, on west edge of road, in rock; aluminum tablet stamped "B B 21 1906"	1,354.915
Hoopa, 2.4 miles south of, 1,300 feet south of miletree 63, 1,700 feet north of bridge, on west edge of road, in boulder; aluminum tablet stamped "B B 22 1906"	386.042
Hoopa, 1,000 feet north of Bigard's store, in right edge of steps to United States Indian agent's office; aluminum tablet stamped "B B 1906 23 352"	351.270
From Hoopa north along road and trail 7.5 miles (single spur line)	
Hoopa, 3.2 miles north of, 150 feet south of Soctish Creek, west edge of road, in rock; aluminum tablet stamped "B B 24 1906"	308.482
Hoopa, 7.5 miles north of, on west edge of trail, in slate rock; aluminum tablet stamped "B B 25 1906"	1,006.208
From Hoopa southwest along trail and road to forks of road 3.4 miles northwest of Berry ranch house	
Hoopa, 3.8 miles west of, 20 feet west of Fourmile Creek, in large boulder; aluminum tablet stamped "B 1906 1716"	1,715.199
Hoopa, 6 miles west of, 10 feet south of trail, in boulder; aluminum tablet stamped "B 1906 27 2899"	2,900.323
Bear's ranch, 4.5 miles east of, on north edge of trail, in highest point of rock; aluminum tablet stamped "B 1906 28 3495"	3,494.856
At point 8.8 miles north of Somes Bar	
Somes Bar, 8.8 miles north of, west bank of Klamath River, in base of oak tree 30 inches in diameter; nail with aluminum tag stamped "B 102 661"	656.73

PRESTON PEAK QUADRANGLE

[Latitude 41° 30′–42°; longitude 123° 30′–124°]

DEL NORTE AND SISKIYOU COUNTIES

Primary leveling by L. F. Biggs in 1906–7

From Torgerson's ranch north to Cottage Grove

	Feet
Somes Bar, 11.8 miles north of, south of gulch, 200 feet south of small stream, east of trail, in small boulder; aluminum tablet stamped "B B 1907 39 900"	895.588
Somes Bar, 13.2 miles north of, 500 feet north of bridge over Rock Creek, south of trail, in base of oak tree 14 inches in diameter; nail with aluminum tag stamped "B 104 720"	715.34
Somes Bar, 15.8 miles north of, east of trail, 0.5 mile south of corral on top of hill, in base of sugar-pine tree 36 inches in diameter; nail with aluminum tag stamped "B 107 1433"	1,429.04
Somes Bar, 17 miles north of, 0.2 mile north of summit of Dillon Mountain, west of trail, in small boulder; aluminum tablet stamped "B B 1907 40 1801"	1,797.102
Somes Bar, 19.5 miles north of, 500 feet north of summit between Dillon Creek and Cottage Grove, east of trail, in base of fir tree 36 inches in diameter; nail with aluminum tag stamped "B 110 1261"	1,255.50
Cottage Grove, 1.5 miles south of, 2.1 miles north of Dillon Creek, west of trail, corner of corral at Aubrey's ranch, in large boulder; aluminum tablet stamped "B B 1907 41 787"	780.877
Cottage Grove, 1.5 miles south of, river at J. C. Aubrey's ranch; surface of water, August, 1907	750
Cottage Grove, 0.7 mile south of, 21.2 miles north of Somes Bar, east of trail, in base of 12-inch forked madrone tree; nail with aluminum tag stamped "B 111 869"	862.93

Primary leveling by L. F. Biggs in 1915

From California-Oregon line southwest along highways to Gasquet

Oregon–California State line, about 800 feet south of, 50 feet north of road at summit; bronze tablet in rock stamped "3100 1915 9"	3,099.781
Oregon–California summit, 1 mile southwest of, 1.3 miles north of Monumental, south edge of road; chiseled point on boulder, chiseled "U. S. 2734"	2,733.72
Monumental, 500 feet south of hotel, east edge of road, in root of 36-inch fir tree; copper nail, scribed "U. S. 2420"	2,420.35
Monumental, 1.1 miles south of, on east edge of road, in root of 72-inch fir tree; copper nail, scribed "U. S. 2312"	2,312.30
Monumental, 2.1 miles south of, on east edge of road, in root of sugar-pine tree; copper nail, scribed "U. S. 2233"	2,232.77
Monumental, 3.1 miles south of, on east edge of road, 100 feet south of milepost 5; bronze tablet in rock, stamped "2218 10 1915"	2,218.316
Monumental, 3.8 miles south of, 3 miles north of Patrick Creek Hotel, at saddle between Shelby and east fork of Patrick Creek, east side of road; chiseled circle on rock, chiseled "U. S. 2014"	2,013.93

	Feet
Patrick Creek, 1.5 miles northeast of, at west edge of road at trail cut-off, in root of 18-inch sugar-pine tree; copper nail, scribed "U. S. 1685"	1,684.53
Patrick Creek, 0.9 mile north of, at "Adams 17 miles" signpost, on rock; chisel mark	1,618.31
Patrick Creek, 0.5 mile northeast of, south edge of road, in root of 60-inch fir tree; copper nail, scribed "U. S. 1440"	1,440.17
Patrick Creek, 50 feet east of mouth of east fork, 20 feet north of east end of bridge; bronze tablet stamped "1263 11 1915"	1,263.282
Patrick Creek, 0.7 mile southwest of, south edge of road, at switchback, in root of 12-inch fir tree; copper nail, scribed "U. S. 1560"	1,559.56
Patrick Creek, 2.0 miles southwest of, on west side of road, on rocky point; chiseled point on boulder, chiseled "U. S. 1933"	1,932.49
Patrick Creek, 2.7 miles southwest of, about midway between mileposts "C. C. 28" and "C. C. 29"; chiseled point on boulder, chiseled "U. S. 1852"	1,852.25
Patrick Creek, 4.0 miles southwest of, on west side of road, at junction with trail to Middle Fork; chiseled point on boulder, chiseled "U. S. 1963"	1,963.14
Patrick Creek, 5.1 miles southwest of, 100 feet east of road at junction with trail to Middle Fork, top of knoll; chiseled point on boulder, chiseled "U. S. 2277"	2,276.60
Patrick Creek, 5.3 miles southwest of, 50 feet north of road at sharp horseshoe bend, at point of ridge; bronze tablet in rock stamped "2321 1915 12"	2,321.093
Patrick Creek, 6 miles southwest of, south edge of road at summit between Patrick Creek and Smith River; chiseled point on boulder, chiseled "U. S. 2488"	2,487.54
Gasquet, 6.6 miles northeast of, on south edge of road, in root of 24-inch fir tree; copper nail, scribed "U. S. 2166"	2,165.64
Gasquet, 5.7 miles northeast of, south edge of road; chiseled point on boulder, chiseled "U. S. 1777"	1,777.05
Gasquet, 4.7 miles northeast of, in sharp horseshoe bend where road passes through saddle, 20 feet southeast of 14-inch fir tree; bronze tablet stamped "1423 1915 13"	1,422.682
Gasquet, 3.6 miles northeast of, south edge of road, in root of 38-inch fir tree; copper nail, scribed "U. S. 1360"	1,360.32
Gasquet, 2.6 miles northeast of, south edge of road at junction with Elk Camp trail, in root of 18-inch fir tree; copper nail, scribed "U. S. 1140"	1,140.04
Gasquet, 1.5 miles northeast of, north edge of road, 60 feet west of milepost "C. C. 19," in root of 18-inch tan-oak tree; copper nail, scribed "U. S. 769"	768.72
Oregon-California State line, on boulder at south edge of road; chiseled point, marked "U. S. 3056"	3,056.16

From Gasquet southwest along highways to Crescent City

Middle Fork of Smith River; floor of bridge over	373.4
Water level under bridge, Middle Fork of Smith River, June 5, 1915	335.8
Gasquet, 1.5 miles southwest of, 200 feet west of Adams station; copper nail in root of white-oak tree, scribed "U. S. 331"	330.32

	Feet
Gasquet, 300 feet south of range headquarters, 80 feet northeast of ¼ corner, 0.25 mile north of corner of secs. 20, 21, 28, and 29, T. 17 N., R. 2 E.; bronze tablet in boulder stamped "390 1915 14"	389.466
Gasquet, 60 feet south of bridge over Middle Fork of Smith River, in 32-inch white-oak tree; copper nail scribed "U. S. 378"	378.17

From Bald Hill east along highways to Clear Creek. (Part of unadjusted line closing 1.589 feet high upon value in Bull. 481, p. 60)

Bummer Lake, 1 mile east of, on south side of trail, in root of 48-inch pine tree; copper nail, scribed "J. S. 1442"	1,441.53
Rock Creek, 0.23 mile west of mouth of, at fork of trail to Paradise ranch, in root of 14-inch cedar tree; copper nail, scribed "U. S. 642"	642.50
Rock Creek bridge, 100 yards above mouth of Rock Creek, 20 feet east of east end of bridge, in rock at trail sign; bronze tablet stamped "407 20 1915"	407.189
Rock Creek, 1.1 miles southeast of, 100 feet west of small creek, south edge of trail, in root of 30-inch fir tree; copper nail, scribed "U. S. 508"	508.03
Rock Creek, 2.2 miles southeast of, on north edge of trail, in root of 30-inch fir tree; copper nail, scribed "U. S. 552"	551.91
Rock Creek, 3 miles southeast of, 100 feet south of junction with Canthook trail, in root of 18-inch tan-oak tree, on east edge of trail; copper nail, scribed "U. S. 543"	542.40
Water level at Shallow Ford of South Fork of Smith River, 2.30 p. m., June 14, 1915	494.6
Shallow Ford, on north bank of Smith River, on east side of trail, 70 feet northeast of water's edge, in root of alder tree; copper nail, scribed "U. S. 502"	501.63
Shallow Ford, 200 feet northeast of, on north bank of Smith River, 8 feet above floor, in rock cliff; bronze tablet stamped "512 21 1915"	512.032
Shallow Ford, 0.6 mile southeast of, 100 feet southeast of cable crossing, in root of 30-inch live-oak tree; copper nail, scribed "U. S. 557"	556.86
Shallow Ford, 1.6 miles southeast of, 150 feet west of corner of secs. 13, 14, 22, and 23, T. 15 N., R. 2 E., on south side of trail, in root of 20-inch oak tree; copper nail, erroneously scribed "U. S. 706"	716.22
Hurdy Gurdy Creek, water level at trail crossing, June 15, 1915	586.6
Hurdy Gurdy Creek, 200 yards above mouth of, on east side of creek, at north edge of trail near camp site; bronze tablet in rock stamped "654 22 1915"	654.009
Big Flat, at west end of, at gate, in root of 24-inch fir tree; copper nail, scribed "U. S. 810"	810.01
Big Flat, 200 feet south of, Wilson's ranch house, in root of forked madrone tree; copper nail, scribed "U. S. 841"	840.72
Big Flat, 1.3 miles east of, at south edge of trail, on sharp ridge, in tan-oak tree; copper nail, scribed "U. S. 1227"	1,226.71
Big Flat, 1.3 miles east of, at south edge of trail, on sharp ridge, in root of 24-inch tan-oak tree; copper nail, scribed "U. S. 1767"	1,766.58
Big Flat, 2.6 miles east of, 3.1 miles west of Quartz Creek, on summit in saddle at top of ridge, in root of 20-inch madrone tree; copper nail, scribed "U. S. 2,053"	2,053.31

POLITECHNIKA GDAŃSKA ZAKŁAD GEOLOGII

	Feet
Summit between Blackhawk and Quartz creeks, on south edge of trail, in root of 38-inch tan-oak tree; copper nail, scribed "U. S. 2586"	2,585.69
Quartz Creek, 1.3 miles west of, on south edge of trail, in root of double fir tree; copper nail, scribed "U. S. 2574"	2,573.61
Water level at Quartz Creek, 10.10 a. m., June 19, 1915	1,327.5
Quartz Creek, 70 feet south of lower crossing of Kelsey trail, in root of 30-inch fir tree; copper nail, scribed "U. S. 1313"	1,312.96
Quartz Creek, 50 feet south of lower crossing of Kelsey trail, on east side of camp site; bronze tablet set in rock ledge, stamped "1319 23 1915"	1,319.311
Quartz Creek crossing, 0.7 mile east of, on south side of trail, below summit of ridge, in root of 24-inch crooked madrone tree; copper nail, scribed "U. S. 2135"	2,135.14
Quartz Creek, 1.5 miles east of, on north edge of trail, at summit between Quartz Creek and North Fork, in root of 32-inch tan-oak tree; copper nail, scribed "U. S. 2933"	2,933.32
North Fork crossing, 1.5 miles north of, on west side of trail, at point of ridge; bronze tablet in large boulder stamped "2984 24 1915"	2,984.291
North Fork crossing, 0.6 mile northwest of, on east side of trail, at fork to feeding lot, in root of 12-inch tan-oak tree; copper nail, scribed "2058 U. S."	2,057.81
North Fork crossing, 0.16 mile north of, 20 feet north of trail, on summit of large boulder; chiseled point, chiseled "U. S. 1568"	1,568.31
North Fork crossing, 100 feet north of, on west bank at edge of shallow ravine, in root of 32-inch fir tree; copper nail, scribed "U. S. 1355"	1,355.08
Water level at trail crossing of North Fork of South Fork of Smith River, 11.30 a. m., June 23, 1915	1,348.6
North Fork crossing, 0.8 mile east of, on north edge of trail, in root of 20-inch crooked madrone tree; copper nail, scribed "U. S. 2004"	2,003.45
North Fork crossing, 1.7 miles east of, on south edge of trail, in root of 16-inch tan-oak tree; copper nail, scribed "U. S. 3012"	3,011.59
Baldy Peak, 2.8 miles west of, at side of trail, top of ridge, in root of 30-inch fir tree; copper nail, scribed "U. S. 3736"	3,736.20
Baldy Peak, 1.8 miles southwest of, on west edge of trail, on summit of large boulder; chiseled circle, chiseled "U. S. 4305"	4,305.35
South Peak of Ship Mountain (distance?)	5,283.
Central Peak of Ship Mountain (distance?)	5,307.
Baldy Peak, 0.8 mile west of, on south side of trail, at edge of scrub timber, in root of 16-inch white-fir tree; copper nail, scribed "U. S. 5343"	5,343.36
Baldy Peak, at summit of, 30 feet north of trail; bronze tablet in rock stamped "5775 25 1915" (cairn with tree is 4 feet south of tablet)	5,775.440
Baldy Peak, 0.3 mile east of, on north side of trail, just above base of saddle, in root of 36-inch pine tree; copper nail, scribed "U. S. 5355"	5,355.10
Harringtons, 1 mile east of north side of trail, about 800 feet southwest of saddle; bronze tablet in boulder, stamped "5425 26 1915" (small cairn and rock close by)	5,425.185

	Feet
Harringtons, 1.8 miles east of, on south side of trail, at summit of ridge, just east of small meadow, in root of 36-inch fir tree; copper nail, scribed "U. S. 5467"	5,467.09
Bear Mountain, 3.9 miles west of, south side of trail where trail leaves canyon, in 40-inch pine tree; copper nail, scribed "U. S. 5291"	5,291.37
Bear Mountain, 3.2 miles west of, south edge of trail at summit of Red Mountain, 12 feet east of two pine trees; bronze tablet in rock stamped "5616 27 1915"	5,616.520
Bear Mountain, 2.3 miles west of, north side of trail at saddle, in root of 36-inch yellow-pine tree; copper nail, scribed "U. S. 5158"	5,158.59
Bear Mountain, 1.1 miles west of, 60 feet north of trail, on north side of third summit west of Bear Mountain, on rock; chiseled point, chiseled "U. S. 5499"	5,449.57
Bear Mountain triangulation station; bronze tablet stamped "5740 28 1915"	5,740.076
Bear Mountain, 1.1 miles east of, south side of trail, 900 feet north of saddle, in root of 38-inch fir tree; copper nail, scribed "U. S. 5092"	5,092.02
Bear Mountain, 2.5 miles east of, south side of trail, in root of 30-inch pine tree; copper nail, scribed "U. S. 4747"	4,746.90
Bear Mountain, 3.6 miles east of, on north side of trail, 300 feet east of saddle, in root of 20-inch pine tree; copper nail, scribed "U. S. 4276"	4,276.14
Mouth of Clear Creek, 6.8 miles west of, 100 feet west of junction with Cottage Gim and Happy Camp trail, in root of 20-inch pine tree; copper nail, scribed "U. S. 4229"	4,229.37
Clear Creek, 6.3 miles west of, 0.5 mile east of trail forks at summit of ridge, 20 feet south of trail; bronze tablet in rock stamped "4318 29 1915"	4,317.786

From Patrick Creek north along trail to High Dome (single spur line)

Rock, west edge of road above Patrick Creek	1,618.367
Patrick Creek Hotel, 0.6 mile north of, south edge of trail, in root of dead pine tree; copper nail	1,804.47
High Dome station, 2 miles south of, south edge of trail, in base of 36-inch sugar-pine tree; copper nail, scribed "U. S. 2163"	2,163.49
High Dome forester station, 0.6 mile south of, south edge of trail, in root of 20-inch live-oak tree; copper nail, scribed "3388 U. S."	3,388.15
High Dome forester station, 20 feet north of lookout site; bronze tablet in rock stamped "3821 0 1915"	3,821.090

SAWYERS BAR QUADRANGLE

[Latitude 41°–41° 30′; longitude 123°–123° 30′]

HUMBOLDT, SISKIYOU, AND TRINITY COUNTIES

Primary leveling by L. F. Biggs in 1907

From Snowden west along road down Salmon River to Somes Bar

	Feet
Summit, 2.9 miles west of, on south edge of road, in rock; aluminum tablet stamped "B 1907 16 4190"	4,187.696
Summit, 5 miles southwest of, at north edge of road, 1,500 feet west of small bridge, in base of 48-inch fir tree; nail with aluminum tag stamped "B 41 3450"	3,446.15

	Feet
Snowden, 0.6 mile west of, 400 feet south of bridge, west side of creek, west of road; aluminum tablet stamped "B 17 1907 2979"	2,974.612
Snowden, 2.4 miles west of, in southwest corner of steel bridge; bridge spike with aluminum tag stamped "B 44 2598," spike stamped "B"	2,593.73
Snowden, 5.3 miles west of, 10 feet north of fork in road, in large boulder; aluminum tablet stamped "B 1907 18 2425"	2,420.440
Sawyers Bar, east end of, north of road, in large slate ledge; aluminum tablet stamped "B 19 1907 2173"	2,171.794
Sawyers Bar, 3.1 miles west of, north of road, in rock ledge; aluminum tablet stamped "B 1907 20 1995"	2,022.460
Sawyers Bar, 6.1 miles west of, north of road, at entrance to small gulch, in granite rock; aluminum tablet stamped "B 1907 21 1787"	1,914.360
Sawyers Bar, 8.9 miles west of, south of road at cut making horseshoe; aluminum tablet stamped "B B 1907 22 1677"	1,716.340
Sawyers Bar, 10.9 miles west of, south of road, in base of live-oak tree 14 inches in diameter; nail with aluminum tag stamped "B 54 1429"	1,456.71
Forks of Salmon, 2.4 miles east of, north of road, 500 feet west of bridge, in rock; aluminum tablet stamped "B 1907 23 1484"	1,511.430
Forks of Salmon, 400 feet east of Bennett's store, north of road, in boulder; aluminum tablet stamped "B B 1907 24 1214"	1,241.884
Forks of Salmon, 3.2 miles west of, 400 feet west of old Hodge mine, south of trail, 15 feet from edge of bluff over river, in large boulder; aluminum tablet stamped "B B 1907 25 1124"	1,151.340
NOTE.—The line crosses here to the southwest side of Salmon River.	
Forks of Salmon, 5.8 miles west of, 600 feet east of small bridge, south of trail, in large boulder; aluminum tablet stamped "B B 1907 26 1208"	1,235.834
Forks of Salmon, 7.8 miles west of, 500 feet north of summit between Forks of Salmon and Buttlers Flat, east of road, in large boulder; aluminum tablet stamped "B B 1907 27 2531"	2,555.390
Buttlers Flat, 0.4 mile west of, north of road on edge of bluff, in large boulder; aluminum tablet stamped "B B 1907 28 858"	882.250
Buttlers Flat, 1.9 miles west of, south of trail, in base of madrone tree 24 inches in diameter; spike with aluminum tag stamped "B 70 1616"	1,640.58
Buttlers Flat, 3 miles west of, 3.04 miles east of summit between Buttlers Flat and Somes Bar, 15 feet north of trail, in boulder; aluminum tablet stamped "B B 1907 29 1779"	1,793.654
Somes Bar, 50 feet west of store; point on rock, painted "501"	525.27
From Somes Bar north to Torgerson's ranch	
Somes Bar, 0.9 mile north of, north side of Salmon River, south of trail, in base of 18-inch madrone tree; nail with aluminum tag stamped "B 93 551"	547.27
Somes Bar, 4 miles north of, west of trail, in base of pine tree 24 inches in diameter; nail with aluminum tag stamped "B 96 1504"	1,499.70
Somes Bar, 4.3 miles north of, east of trail, between two small streams, in boulder; aluminum tablet stamped "B B 1907 37 1498"	1,484.113

	Feet
Somes Bar, 6.7 miles north of, 1.7 miles south of Torgerson's ranch, west of trail, in base of oak tree 24 inches in diameter; nail with aluminum tag stamped "B 99 699"	591.663
Somes Bar, 8.3 miles north of, 150 feet north of corral near bridge over small stream at Torgerson's ranch, in top of large boulder; aluminum tablet stamped "B B 1907 38 680"	675.438
Torgerson's ranch, Klamath River; surface of water, August 12, 1907	591

From Somes Bar southwest down Salmon River to Witchpec, thence south up Trinity River to point 7.5 miles north of Hoopa

Somes Bar, 0.2 mile west of, south of trail, in large boulder; aluminum tablet stamped "B B 1907 564 30"	588.046
Junction of Salmon and Klamath rivers, 0.5 mile south of, west of trail, at bend, in boulder; aluminum tablet stamped "B B 1907 31 503"	526.895

SEIAD QUADRANGLE

[Latitude 41° 30′–42°; longitude 123°–123° 30′]

SISKIYOU COUNTY

Primary leveling by L. F. Biggs in 1907

From Cottage Grove northeast along road to Seiad, thence southeast to Meamber school[1]

	Feet
Cottage Grove, 0.5 mile north of, west of trail, 500 feet north of small stream, in boulder; aluminum tablet stamped "B B 1907 42 847"	843.363
Cottage Grove, 2.4 miles north of, east of trail, 1,000 feet north of mouth of Ukonome Creek, in base of pine tree 24 inches in diameter; nail with aluminum tag stamped "B 113 1057"	1,052.94
Cottage Grove, 2.4 miles north of, east of trail, 1,000 feet north of New York Ravine, in base of pine tree 18 inches in diameter; nail with aluminum tag stamped "B 114 1240" (not found in 1914)	1,236.56
Cottage Grove, 4.6 miles north of, 25 feet east of trail, 150 feet north of Crawford Creek, 10 feet north of cluster of pine trees, in large boulder; aluminum tablet stamped "B B 1907 43 1290"	1,285.965
Cottage Grove, 7 miles north of, at Siskiyou mine, north of trail, on summit of hill 200 feet north of mine, in base of pine tree 36 inches in diameter; nail, aluminum tag stamped "B 117 1619"	1,614.96
Happy Camp, 9.8 miles south of, 40 feet north of bridge over Clear Creek, in country boulder; aluminum tablet stamped "B B 1907 44 979"	974.863
Cottage Grove, 11.3 miles north of, east of trail, 200 feet north of cabin, in base of pine tree 10 inches in diameter; nail with aluminum tag stamped "B 119 1036" (not found in 1914)	1,032.32
Happy Camp, 3.6 miles south of, west of trail, 200 feet south of summit of hill, in boulder; aluminum tablet stamped "B B 1907 45 1535"	1,531.026
Happy Camp, 1.2 miles south of, 75 feet north of barn on Gride ranch, in base of oak tree 39 inches in diameter; nail with aluminum tag stamped "B 122 1147" (not found in 1914)	1,143.13

[1] On this line a computed gross error of 1 yard between Scott Bar and Meamber School was arbitrarily adjusted locally at Wilke's ranch, where another yard error possibly exists.

	Feet
Happy Camp, southwest corner of brick wall of Eclipse saloon; aluminum tablet stamped "B B 1907 46 1092"	1,088.455
Happy Camp, 2.8 miles north of, west of road, in base of oak tree 14 inches in diameter; nail with aluminum tag stamped "B 127 1194"	1,189.76
Happy Camp, 4.8 miles north of, 100 feet north of summit of hill north of trail, in rock ledge; aluminum tablet stamped "B B 1907 1727"	1,723.443
Mouth of Scott River, 2.3 miles east of, west of road, in base of oak tree 24 inches in diameter; nail with aluminum tag stamped "B 197 1581"	1,582.94
Mouth of Scott River, 3.9 miles east of, north of road, 0.5 mile west of Everill ranch house, in slate ledge; aluminum tablet stamped "B B 1907 65 1593"	1,595.041
Happy Camp, 8.7 miles north of, east of road, in large boulder; aluminum tablet stamped "B B 1907 48 1232"	1,227.845
Nolton, 2 miles east of, 10 feet north of bunk house on Martin's ranch, in large boulder; aluminum tablet stamped "B B 1907 49 1296"	1,291.472
Nolton, 3.9 miles east of, south of road; nail in base of maple tree 36 inches in diameter, aluminum tag stamped "B 136 1341"	1,336.68
Lowden, in front of schoolhouse, in base of oak tree; nail with aluminum tag stamped "B 139 1386"	1,381.49
Seiad, 0.8 mile south of, east of road, on east bank of Klamath River, in rock ledge; aluminum tablet stamped "B B 1907 55 1446"	1,448.039
NOTE.—The line crosses here to the south bank of Klamath River.	
Seiad, 3.8 miles east of, north of road, in base of maple tree 36 inches in diameter; nail, aluminum tag stamped "B 162 1437"	1,438.96
Seiad, 6.2 miles east of, south of road, 1,000 feet east of Burhardt's ranch house, in boulder; aluminum tablet stamped "B B 1907 56 1514"	1,515.633
Hamburg, 1 mile southeast of, 250 feet east of Willard house; nail in base of 24-inch oak tree; aluminum tag stamped "B 165 1532" (not found in 1914)	1,533.54
Hamburg, 1.2 miles southeast of, south of road, 1,000 feet west of mouth of Scott River, in large boulder; aluminum tablet stamped "B B 1907 57 1547"	1,548.683
Hamburg, 1.6 miles southeast of, in northeast corner of bridge over Scott River; key bolt stamped "B 1582," aluminum tag stamped "B 1582 167" (not found in 1914)	1,582.91
Scott Bar, northeast corner of Simon's warehouse; aluminum tablet stamped "B B 1907 58 1685"	1,687.135
Scott Bar, 5.3 miles southwest of, west of road, in large boulder; aluminum tablet stamped "B B 1707 59 2153" (possibly 3 or 6 feet too high)	2,154.988
Scott Bar, 8.6 miles southwest of, west of road, 25 feet south of shed at Kleaver ranch, in large boulder; aluminum tablet stamped "B B 1907 60 2112"	[1]2,113.660
Scott Bar, 10.9 miles southwest of, east of road, 25 feet north of bridge over Scott River, in large boulder; aluminum tablet stamped "B B 1907 161 2233"	[1]2,234.835
Fort Jones, 15.8 miles west of, west of road, 1,000 feet east of Canyon Creek, on large boulder; chisel point, painted "U. S. 177 2355"	[1]2,357.25

[1] Possibly 3 feet or 6 feet too low.

	Feet
Fort Jones, 13.5 miles west of, 100 feet north of Wilke's ranch house, east of road, on large rock; chisel point painted "U. S. 178 2499"	[2] 2,490.27
Fort Jones, 11.9 miles west of, east side of road, 1 mile north of Anderson's ranch, in rock ledge; aluminum tablet stamped "B B 62 1907 2,580"	[2] 2,579.296

From Lowden north to Watkins, Oreg.

Lowden, 0.8 mile north of, east of road, in base of oak tree 36 inches in diameter; nail with aluminum tag stamped "B 141 1545"	1,541.41
Lowden, 2 miles northeast of, north side of road, 50 feet east of small stream on Raney's ranch, in large boulder; aluminum tablet stamped "B B 1907 50 1,595"	1,591.190
Lowden, 3.7 miles north of, east of trail, at end of wagon road, in base of oak tree 48 inches in diameter; nail with aluminum tag stamped "B 143 1842"	1,838.33
Lowden, 6.2 miles north of, west of trail, 4.1 miles west of summit between Lowden and Eileen, in small quartz boulder; aluminum tablet stamped "B B 51 1907 4033"	3,927.926
Lowden, 7.6 miles north of, east of trail, 300 feet east of cabin on Wetzel & Well's claim, in base of fir tree 24 inches in diameter; nail with aluminum tag stamped "B 146 5340" (not found in 1914)	5,235.98
Eileen, 4.1 miles south of, on summit between Lowden and Eileen, 15 feet north of trail, in slate ledge; aluminum tablet stamped "B B 1907 52 6189"	6,185.403
Eileen, 2.1 miles south of, 250 feet south of corral, west of trail, in base of fir tree 48 inches in diameter; nail with aluminum tag stamped "150 5446"	5,442.01
Eileen, 1.2 miles south of, 25 feet east of junction of trail to Blue Ledge and Eileen, 250 feet south of Sophia mine, in base of pine tree 36 inches in diameter; nail with aluminum tag stamped "B 152 4765"	4,760.59
Eileen, 0.3 mile south of, 0.3 mile north of Blue Ledge mine, east edge of road, in rock ledge; aluminum tablet stamped "B B 1907 53 3829"	3,825.352
Eileen, 0.6 mile north of, 250 feet north of bridge over small stream, west of road, in base of 72-inch sugar-pine tree; nail with aluminum tag stamped "B 155 3340"	3,335.51
Eileen, 1.5 miles north of, west side of road, in base of 72-inch sugar-pine tree; nail, aluminum tag stamped "156 B 2759"	2,755.42
California-Oregon State line, on boulder, at south edge of road; chiseled point, marked "U. S. 3,056"	3,056.16

Primary leveling by L. F. Biggs in 1915

Near Clear Creek. (Part of unadjusted line closing 1.589 feet high upon value in Bull. 481, p. 60. See Preston Peak quadrangle)

Clear Creek, 5.1 miles west of, in saddle, south side of trail, in root of 40-inch fir tree; copper nail, scribed "U. S. 3385"	3,384.70
Clear Creek, 4.1 miles west of, just above saddle, east side of trail, in root of 42-inch pine tree; copper nail, scribed "U. S. 3400"	3,404.89

[2] Possibly 3 feet or 6 feet too low.

	Feet
Clear Creek, 2.7 miles west of, at summit of ridge, on south side of trail, in root of 30-inch fir tree; copper nail, scribed "U. S. 3220"	3,229.68
Clear Creek, 1.8 miles south of, on east side of trail, in root of 14-inch madrone tree; copper nail, scribed "U. S. 2381"	2,380.87
Clear Creek, 9.8 miles south of Happy Camp, 900 feet above mouth, 40 feet north of bridge over creek, east edge of trail, in rock; bronze tablet stamped "B B 1907 44 979" (Bull. 481, p. 60, adjusted value 974.863), line value	976.452

DEGREE QUADRANGLE 41°–42°, 124°–125°

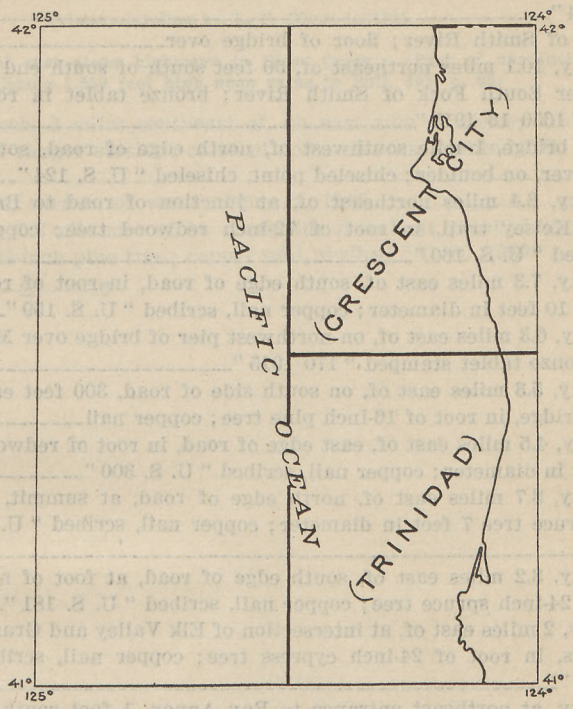


FIGURE 52.—Diagram of degree quadrangle 41°–42°, 124°–125°

CRESCENT CITY QUADRANGLE

[Latitude 41° 30′–42°; longitude 124°–124° 30′]

DEL NORTE COUNTY

Primary leveling by L. F. Biggs in 1915

From Gasquet southwest along highways to Crescent City

	Feet
Gasquet, 2.9 miles southwest of, 200 feet north of bridge, east edge of road, in root of 18-inch bull-pine tree; copper nail, scribed "U. S. 596"	595.88
Gasquet, 4 miles southwest of, south edge of road at summit and sharp turn, in root of 44-inch redwood tree; copper nail, scribed "U. S. 839"	839.19
Gasquet, 4.6 miles southwest of, 300 feet north of milepost C. C. 13, east edge of road, in vertical wall; bronze tablet stamped "654 1915 15"	653.783
Gasquet, 5.8 miles southwest of, 100 feet west of milepost "C. C. 12," in root of 24-inch fir tree; copper nail, scribed "U. S. 610"	609.65

	Feet
Gasquet, 6.9 miles southwest of, west edge of road, 100 feet south of milepost "C. C. 11," in root of 40-inch fir tree; copper nail, scribed "U. S. 593"	593.03
Gasquet, 8 miles southwest of, east side of road, 150 feet south of milepost "C. C. 10," in root of 18-inch fir tree; copper nail, scribed "U. S. 334"	333.97
South Fork of Smith River; floor of bridge over	162.9
Crescent City, 10.1 miles northeast of, 50 feet south of south end of bridge over South Fork of Smith River; bronze tablet in rock stamped "1650 16 1915"	164.501
South Fork bridge, 1 mile southwest of, north edge of road, south bank of river, on boulder; chiseled point, chiseled "U. S. 124"	123.78
Crescent City, 8.4 miles northeast of, at junction of road to Bald Hill and Kelsey trail, in root of 72-inch redwood tree; copper nail, scribed "U. S. 160"	159.65
Crescent City, 7.3 miles east of, south edge of road, in root of redwood tree 10 feet in diameter; copper nail, scribed "U. S. 159"	158.60
Crescent City, 6.3 miles east of, on northwest pier of bridge over Mill Creek; bronze tablet stamped "170 1915"	169.814
Crescent City, 5.3 miles east of, on south side of road, 300 feet east of small bridge, in root of 16-inch pine tree; copper nail	241.19
Crescent City, 4.5 miles east of, east edge of road, in root of redwood tree 6 feet in diameter; copper nail, scribed "U. S. 300"	299.24
Crescent City, 3.7 miles east of, north edge of road, at summit, in root of spruce tree 7 feet in diameter; copper nail, scribed "U. S. 531"	530.71
Crescent City, 3.2 miles east of, south edge of road, at foot of hill, in root of 24-inch spruce tree; copper nail, scribed "U. S. 181"	180.28
Crescent City, 2 miles east of, at intersection of Elk Valley and Grants Pass roads, in root of 24-inch cypress tree; copper nail, scribed "U. S. 37"	39.05
Crescent City, at northeast entrance to Bay Annex, 1 foot south of door; chiseled cross on south walk, chiseled "U. S. + B. M."	12.17
Crescent City, at west entrance of Del Norte County Courthouse, in concrete floor; bronze tablet stamped "30 1915 18"	29.447
Crescent City Lighthouse, about 140 feet east of; copper plug in rock, probable U. S. C. & G. S. bench mark. (Elevation given on Crescent City Harbor map by U. S. Army Engineers, low water datum 19.54)	15.840
Crescent City Lighthouse, 60 feet northeast of, in concrete base of flagpole; bronze tablet stamped "58 19 1915"	57.760

From point 8.4 miles northeast of Crescent City to Bald Hill triangulation station. (Part of unadjusted line to Clear Creek. See Preston Peak quadrangle)

Crescent City, 8.4 miles northeast of, at junction of road to Bald Hill and Kelsey trail, in root of 72-inch redwood tree; copper nail, scribed "U. S. 160"	159.65
Bald Hill, 2.6 miles west of, on north edge of road, in root of 120-inch redwood tree; copper nail, scribed "U. S. 553"	552.84
Bald Hill, 1.8 miles west of, on north edge of road, 200 feet west of bars near small lake, in root of 38-inch fir tree; copper nail, scribed "U. S. 944"	944.04

	Feet
Bald Hill, 0.6 mile west of, on north edge of road, in root of 40-inch fir tree; copper nail, scribed "U. S. 1568"	1,567.80
Bald Hill ranch house, 1 mile east of, 200 feet south of Kelsey trail, at top of ridge, U. S. C. & G. S. triangulation station on Bald Hill; bronze tablet stamped "1958"	1,957.552

Primary leveling by L. F. Biggs in 1915

From Bald Hill east along highways to Clear Creek. (Part of unadjusted line closing 1.589 feet high upon value in Bull. 481, p. 60)

Bald Hill ranch, 2 miles southeast of, on east side of Kelsey trail, just beyond ranger station; chiseled point on rock, painted "U. S. 2,042"	2,041.92
Bummer Lake, surface of water, June 12, 1915	2,048.4
Bummer Lake, 0.2 mile east of, on south side of trail, at point of ridge, in root of 24-inch pine tree; copper nail, scribed "U. S. 1,989"	1,988.67

SECONDARY ELEVATIONS

Secondary elevations from records and topographic maps of the United States Geological Survey, including vertical-angle bench marks, altitudes of well-known summits, water-surface elevations of prominent lakes, and other useful elevations, are given below. These elevations are approximate only and should not be used for accurate work.

Locality	Quadrangle	County	Elevation
A			*Feet*
Abbott, Mount	Mount Goddard	Fresno-Inyo	13,736
Adin	Alturas	Modoc	4,271
Adobe Lake, water surface	Mount Morrison	Mono	6,489
Agassiz Needle	Mount Goddard	Fresno-Inyo	13,882
Alcatraz Island	San Francisco	San Francisco	130
Alder Hill triangulation station	Pyramid Peak	Amador	7,785
Alder Peak triangulation station	Cape San Martin	Monterey	3,747
Alice Mountain	Bishop	Inyo	13,016
Alta Peak	Tehipite	Tulare	10,521
Alturas Hill	Alturas	Modoc	4,446
Alvarado	Haywards	Alameda	11
American triangulation station	Yuma	San Diego	2,130
Anaheim	Anaheim	Orange	162
Andrews Mountain	Bishop	Inyo	9,470
Angel Island	San Francisco	San Francisco	162
Angora Peak	Pyramid Peak	Eldorado	8,625
Ant Hill	Bakersfield Special	Kern	962
Antelope Mountain	Mount Morrison	Mono	7,642
Antelope Peak	Dardanelles	Alpine-Mono	10,200
Antimony Peak	Mount Pinos	Kern	6,837
Ararat Mountain	Bidwell Bar	Plumas	6,036
Ararat Mountain	Placerville	Eldorado	2,043
Arlington Heights	Taylorsville	Plumas	6,940
Arlington Mountain	Riverside	Riverside	1,851
Arnot Peak	Dardanelles	Alpine	10,036
Arrow Peak	Mount Whitney	Fresno	12,927
Arrow Ridge	Tehipite	do	12,166
Arrowhead Peak	San Bernardino	San Bernardino	4,216
Arroyo Grande	Arroyo Grande	San Luis Obispo	114
Asbestos Mountain	Indio Special	Riverside	5,222
Ash Creek Butte	Shasta	Siskiyou	8,422
Atlas Peak	Napa	Napa	2,662
Avalanche Peak	Tehipite	Fresno	11,264
B			
Bachelor Mountain	Elsinore	Riverside	2,524
Badger Peak	Shasta	Siskiyou	5,038
Bago Mountain	Mount Whitney	Fresno	11,868
Bald Hill	Bidwell Bar	Butte	5,973
Bald Knob triangulation station	Port Harford	San Luis Obispo	1,188
Bald Mountain	Kaiser	Fresno	7,834
Bald Mountain	Placerville	Eldorado	4,613
Bald Mountain	Yosemite	Tuolumne	7,253
Bald Mountain	Mount Morrison	Mono	9,045
Bald Mountain triangulation station	Bryson	Monterey	2,140
Bald Mountain triangulation station	Olancha	Tulare	9,430
Bald Peak	Concord	Contra Costa	1,930
Bald Rock	Bidwell Bar	Butte	3,300
Bald Top	Cape San Martin	San Luis Obispo	2,556
Bald Top	Downieville	Sierra	5,878
Baldwin Lake, water surface	San Gorgonio	San Bernardino	6,674
Ball Dome	Tehipite	Tulare	9,515
Balloon Dome	Kaiser	Madera	6,900
Bally Mountain	Red Bluff	Shasta	6,246
Banner Hill	Banner Hill Special	Nevada	3,904
Banner Hill	Colfax	do	3,904

Locality	Quadrangle	County	Elevation
			Feet
Banner Peak	Mount Lyell [1]	Madera	12,966
Barnabe Mountain	Petaluma	Marin	1,477
Barnard Mountain	Mount Whitney	Inyo-Tulare	14,003
Basalt Hill	Pacheco Pass	Merced	1,705
Basin Mountain	Mount Goddard	Inyo	13,229
Basket Dome	Yosemite Valley map	Mariposa	7,602
Bass Mountain triangulation station	Redding	Shasta	2,778
Bath Mountain	Bridgeport	Tuolumne	10,560
Battle Mountain	Esdondido	San Diego	788
Baxter Mountain	Mount Whitney	Inyo-Fresno	13,118
Bear Basin Butte	Preston Peak	Del Norte	5,303
Bear Butte	Kaiser	Fresno	8,603
Bear Creek Spine	Mount Goddard	Fresno-Inyo	13,709
Bear Mountain	Redding	Shasta	2,625
Bear Mountain triangulation station	Preston Peak	Del Norte-Siskiyou	6,436
Bear Ranch Hill	Bidwell Bar	Plumas	4,906
Beauty Mountain	Ramona	Riverside	5,545
Beckwith Butte	Sierraville	Plumas	7,248
Bedford Peak	Corona	Orange-Riverside	3,720
Bell Bluff	Cuyamaca	San Diego	3,446
Bell Mountain	Elsinore	Riverside	1,844
Bench Lake, water surface	Mount Whitney	Fresno	10,485
Bernardo Mountain	Escondido	San Diego	1,138
Bidwell Peak	Alturas	Modoc	8,551
Bieber	Modoc Lava Bed	Lassen	4,169
Biedeman Mountain	Bridgeport	Mono	8,965
Big Baldy triangulation station	Tehipite	Tulare	8,211
Big Bar Hill	Bidwell Bar	Butte	4,419
Big Canyon triangulation station	Sonora	Tuolumne	5,859
Big Pine Mountain	Santa Ynez	Santa Barbara	6,828
Bills Hill	Gilroy Hot Springs	Santa Clara	1,992
Birch Mountain	Bishop	Inyo	13,660
Bisbee Peak	Jackson	Amador	1,205
Bishop Pass	Mount Goddard	Fresno-Inyo	11,989
Bismark	Napa	Napa-Sonoma	2,370
Bixby Mountain	Point Sur	Monterey	2,928
Black Butte triangulation station	Carbona	San Joaquin	1,087
Black Crater	Shasta	Siskiyou	8,650
Black Fox Mountain	Modoc Lava Bed	do	6,664
Black Hill	Cayucos	San Luis Obispo	654
Black Mountain	Adelaida	do	2,380
Black Mountain	Bridgeport	Mono	11,794
Black Mountain	Elsinore	Riverside	3,033
Black Mountain	Kaiser	Fresno	3,621
Black Mountain	Kernville	Tulare	7,834
Black Mountain	La Jolla	San Diego	1,573
Black Mountain	Mount Hamilton	Santa Clara	3,850
Black Mountain	Mount Whitney	Inyo-Fresno	13,258
Black Mountain	Point Reyes	Marin	1,276
Black Mountain	Ramona	San Diego	4,055
Black Mountain	Tejon	Ventura	6,220
Black Mountain triangulation station	Bishop	Inyo	9,075
Black Mountain triangulation station	Palo Alto	Santa Clara	2,787
Black Mountain triangulation station	Pozo	San Luis Obispo	3,625
Black Mountains	Colfax	Nevada	8,055
Black Peak	Mount Lyell [1]	Madera	10,516
Black Point	Bridgeport	Mono	6,960
Black Point	Kaiser	Fresno	8,107
Blacktop Peak	Mount Lyell [1]	Mono-Tuolumne	12,732
Blanco Mountain	Bishop	Mono	11,280
Bloody Mountain triangulation station	Mount Morrison	do	12,592
Bloomer Hill	Bidwell Bar	Butte	2,980
Blue Mountain	Big Trees	Calaveras	6,070
Blue Rock Mountain	Gonzales	Monterey	2,600
Blue Rock Ridge	Jamesburg	Monterey	2,585
Bluenose Peak	Weaverville	Shasta-Trinity	5,567
Bodie Mountain	Bridgeport	Mono	10,201
BogusMountain	Shasta	Siskiyou	4,622
Bohemotash Mountain	Redding	Shasta	4,458
Bone Mountain	Lompoc	Santa Barbara	2,784
Box Springs Mountain triangulation station.	Riverside	Riverside	3,060
Bowman Mountain	Colfax	Nevada	7,429
Bradley Mountain	Mount Whitney	Inyo-Tulare	13,280
Brewer Mountain	do	Tulare	13,577
Brock Butte	Redding	Shasta	3,451
Broderick Mountain	Yosemite Valley map	Mariposa	6,705
Broken Rib Mountain	Preston Peak	Del Norte	5,824
Brown Cone	Kaiser	Fresno	7,136
Brown Peak	do	do	10,346
Brush Peak	Goleta	Santa Barbara	3,059

[1] In accordance with latest level-adjustment data 9 feet has been added to all elevations on Mount Lyell map.

Locality	Quadrangle	County	Elevation
			Feet
Buck Peak	Tehipite	Fresno	8,795
Buck Peak	Seiad	Siskiyou	6,337
Buck Peak triangulation station	Panoche	San Benito	3,517
Buck Ridge	Metz	San Benito	3,121
Buckhorn Mountain	Seiad	Siskiyou	6,917
Buckhorn Peak	Sonora	Mariposa	3,794
Buckingham Mountain	Yosemite [2]	do	4,523
Bucks Mountain	Bidwell Bar	Plumas	7,231
Buena Vista Lake, water surface	Buena Vista Lake	Kern	291
Buena Vista Peak	Yosemite [2]	Madera	9,692
Buenavista Peak	Tehipite	Tulare	7,692
Bullion Mountain triangulation station	Sonora	Mariposa	4,215
Bull Run Peak	Dardanelles	Alpine	9,489
Bully Choop Mountain	Red Bluff	Shasta-Trinity	7,073
Burnett Peak triangulation station	Bryson	San Luis Obispo	3,025
Burney Butte	Lassen Peak	Shasta	7,880
Burnt Hills	Mount Hamilton	Santa Clara	3,085
Burnt Mountain	Escondido	San Diego	2,144
Burro Mountain	Cape San Martin	Monterey	2,822
Burnt Mountain	Tehipite	Fresno	10,602
Bush Mountain	Bridgeport	Mono	8,852
Butano Ridge	Santa Cruz	San Mateo	1,708
Butler Peak	Deep Creek	San Bernardino	8,502
Butt Mountain	Lassen Peak	Plumas-Tehama	7,831
C			
Cachuma Mountain	Santa Ynez	Santa Barbara	4,685
Cahuenga Peak triangulation station	Santa Monica	Los Angeles	1,825
Cajon Mountain	Hesperia	San Bernardino	5,343
Calabasas Peak	Calabasas	Los Angeles	2,169
Camel Mound	Chico	Tehama	2,377
Camiaca Peak	Bridgeport	Mono-Tuolumne	11,751
Cammel Peak	Bidwell Bar	Plumas	5,760
Campito Mountain	Bishop	Mono	11,543
Canby	Alturas	Modoc	4,351
Cape Horn	Mount Goddard	Fresno	9,529
Cardinal Mountain	Mount Whitney	Inyo-Fresno	13,388
Carmel Mountain triangulation station	Point Sur	Monterey	4,430
Carson Hill	Jackson	Calaveras	1,983
Casa Diablo Mountain triangulation station	Mount Morrison	Mono	7,935
Cascade Cliffs	Yosemite Valley map	Mariposa	7,775
Case Mountain	Kaweah	Tulare	6,840
Castle Dome	Mount Whitney	Fresno	11,415
Castle Peak	Tehipite	do	10,668
Castle Peak triangulation station	Truckee	Nevada	9,139
Castle Rock	Dardanelles	Tuolumne	9,620
Castle Rock	Olancha	Tulare	7,780
Castle Rocks	Kaweah	do	9,150
Castro Peak triangulation station	Triunfo Pass	Los Angeles	2,819
Cathedral Peak	Quien Sabe	Merced	3,481
Cathedral Peak	Mount Lyell [1]	Mariposa-Tuolumne	10,942
Cathedral Rocks	Yosemite Valley map	Mariposa	5,610
Cathedral Spires	do	do	6,551 5,903 6,114
Cave Point	Mount Diablo	Contra Costa	2,100
Cedar Peak	Alturas	Modoc	8,308
Center Mountain	Bridgeport	Mono-Tuolumne	11,220
Cerro Alto	San Luis Obispo	San Luis Obispo	2,617
Chabot Lake, water surface	Haywards	Alameda	235
Chalk Cliff	Bakersfield Special	Kern	1,726
Chalone Mountain	Metz	Monterey-San Benito	3,287
Chanchelulla Mountain	Red Bluff	Trinity	6,475
Charybdis Peak	Mount Goddard	Fresno	13,077
Chatsworth Peak	Santa Susana	Ventura	2,320
Chemehuevis Mountains	Needles	San Bernardino	3,562
Chemise Ridge	San Benito	San Benito	3,630
Cherry Hill	Kernville	Tulare	8,812
Chews Ridge	Jamesburg	Monterey	5,060
Chimney Peak	Kernville	Tulare	8,001
Chimney Rock	Preston Peak	Del Norte	5,742
Chino	Cucamonga	San Bernardino	710
Chiquito Lake, water surface	Mount Lyell [1]	Madera	7,932
Chiquito Pass	do. [1]	do	8,048
Chismahoo Mountain	Ventura	Ventura	2,903
Church Dome	Kernville	Tulare	8,501
Cibo Peak triangulation station	Quien Sabe	San Benito	2,848
Cirque Mountain	Bridgeport	Mono	10,739

[1] In accordance with latest level-adjustment data 9 feet has been added to all elevations on Mount Lyell map.

[2] In accordance with latest level-adjustment data 85 feet has been subtracted from all elevations on Yosemite map.

Locality	Quadrangle	County	Elevation
			Feet
Cirque Peak	Olancha	Inyo-Tulare	12,863
Cisco Butte	Colfax	Placer	6,500
Clark Lake, water surface	Indio Special	San Diego	542
Clark Mountain	Placerville	Eldorado	1,586
Clark Mountain triangulation station	Mount Lyell [1]	Mariposa	11,515
Cleghorn Mountain	Hesperia	San Bernardino	5,319
Cleghorn Pass	do	do	4,537
Clouds Rest triangulation station	Yosemite Valley map	Mariposa	9,924
Coahuila Mountain triangulation station	San Jacinto	Riverside	5,635
Cobblestone Mountain triangulation station	Tejon	Ventura	6,730
Cold Spring Hill	Colfax	Placer	3,699
Colfax Hill	do	do	2,886
Colosseum Mountain	Mount Whitney	Inyo-Fresno	12,417
Columbia Finger	Mount Lyell [1]	Mariposa	10,709
Columbia Rock	Yosemite Valley map	do	5,031
Condor Point	Goleta Special	Santa Barbara	3,000
Cone Peak triangulation station	Junipero Serra	Monterey	5,155
Conejo Mountain	Triunfo Pass	Ventura	1,811
Conness Mountain triangulation station	Mount Lyell [1]	Mono-Tuolumne	12,565
Cook Peak	Kernville	Kern	5,410
Cooper Peak	Dardanelles	Tuolumne	9,581
Copernicus Peak	Mount Hamilton	Santa Clara	4,372
Copper Butte	Seiad	Siskiyou	6,237
Corral Mountain	Mount Goddard	Fresno	9,708
Cottonwood Peak	Shasta	Siskiyou	6,740
Cowles Mountain	La Jolla	San Diego	1,590
Cowtrack Mountain triangulation station	Mount Morrison	Mono	8,875
Coyote Peak	Olancha	Tulare	10,919
Coyote Ridge	Mount Goddard	Inyo	12,246
Crafts Peak triangulation station	Redlands	San Bernardino	8,344
Crag Peak	Olancha	Tulare	9,555
Crater Mountain	Bishop	Inyo	6,123
Crater Peak	Lassen Peak	Shasta	8,724
Crocker Mountain	Mount Goddard	Fresno-Mono	12,448
Crocker Point	Yosemite Valley map	Mariposa	7,090
Cross Mountain	Tehipite	Tulare	12,140
Crossman	Jackson	Amador	3,985
Crown Mountain	Tehipite	Fresno	9,339
Crystal Peak triangulation station	Truckee	Sierra	8,428
Cucamonga Peak	Cucamonga	San Bernardino	8,911
Cushman Hill	Gonzales	San Benito	2,937
Cuyama Peak triangulation station	Mount Pinos	Santa Barbara	5,880
Cuyamaca Peak	Cuyamaca	San Diego	6,515
D			
Dade Mountain	Mount Goddard	Fresno-Inyo	13,635
Dalton Mountain	Dinuba	Fresno	3,605
Dana Mountain triangulation station	Mount Lyell [1]	Mono-Tuolumne	13,059
Dardanelles Cone	Dardanelles	Alpine	9,502
Darwin Mountain	Mount Goddard	Fresno-Inyo	13,841
Davis Mountain	Mount Lyell [1]	Madera-Mono	12,317
Day Mountain	Mount Hamilton	Santa Clara	3,935
Death Valley near Bennett's well	Furnace Creek	Inyo	[3] −276
Death Valley Buttes	Amargosa Region	do	1,990
Decoto	Haywards	Alameda	64
Deer Knob	Pyramid Peak	Eldorado	5,635
Deerhorn Mountain	Mount Whitney	Tulare	13,275
Dennison Mountain	Kaweah	Tulare	8,635
Devil Peak	Placerville	Eldorado	5,340
Devil Peak	Truckee	Placer	7,700
Devil Peak triangulation station	Yosemite [2]	Mariposa	6,994
Devils Bathtub	Mount Goddard	Fresno	9,172
Devils Heart Peak	Tejon	Ventura	5,203
Devils Hill	Monterey	Monterey	860
Devils Nose	Big Trees	Calaveras	4,840
Dewey Point	Yosemite Valley map	Mariposa	7,316
Diamond Peak	Mount Whitney	Fresno-Inyo	13,105
Dicks Peak	Pyramid Peak	Eldorado	10,015
Dinkey Mountain	Kaiser	Fresno	6,742
Disaster Peak	Dardanelles	Alpine	10,022
Doctor Rock	Preston Peak	Del Norte	4,960
Dome Mountain	Modoc Lava Bed	Siskiyou	6,743
Dome Mountain triangulation station	Randsburg	San Bernardino	4,985
Donner Lake, water surface	Truckee	Nevada	5,939
Donohue Peak	Mount Lyell [1]	Mono-Tuolumne	12,082
Double Butte	Elsinore	Riverside	2,565
Double Head	Modoc Lava Bed	Modoc	5,537

[1] In accordance with latest level-adjustment data 9 feet has been added to all elevations on Mount Lyell map.

[2] In accordance with latest level-adjustment data 85 feet has been subtracted from all elevations on Yosemite map.

[3] Below sea level. This is the lowest point in the United States.

Locality	Quadrangle	County	Elevation
			Feet
Double Peak	Mount Lyell [1]	Fresno	10,646
Dougherty Peak	Tehipite	do	12,234
Downey	Downey	Los Angeles	118
Downieville	Downieville	Sierra	3,000
Drakes Point, triangulation station	Vacaville	Solano	624
Duck Lake, water surface	Mount Morrison	Fresno	10,500
Dunderberg Peak, triangulation station	Bridgeport	Mono	12,374
E			
Eagle Lake, water surface	Honey Lake	Lassen	5,115
Eagle Mountain	Furnace Creek	Inyo	3,840
Eagle Mountain	Tesla	San Joaquin	3,027
Eagle Peak	Alturas	Modoc	9,934
Eagle Peak	Cuyamaca	San Diego	3,245
Eagle Peak	Kaiser	Fresno	10,310
Eagle Peak	Yosemite Valley map	Mariposa	7,773
Eagle Peak triangulation station	Bridgeport	Mono	11,825
Eagleville	Alturas	Modoc	4,725
East Flange Rock	Dardanelles	Tuolumne	9,909
East Vidette	Mount Whitney	Fresno-Tulare	12,742
Echo Mountain	Los Angeles	Los Angeles	3,219
Echo Rock	do	do	5,660
Echo Rock	Pasadena	do	5,660
Eddy Mountain	Shasta	Siskiyou	9,151
Elcajon Mountain	Cuyamaca	San Diego	3,680
El Capitan	Preston Peak	Siskiyou	6,832
El Capitan (summit)	Yosemite Valley map	Mariposa	7,564
Eleanor Lake, water surface	Yosemite [2]	Tuolumne	4,609
Electra Peak	Mount Lyell [1]	Madera	12,471
Elephant Head	Gilroy Hot Springs	Santa Clara	1,905
Eli Hill	Pacheco Pass	Stanislaus	2,042
Elizabeth, Mount	Big Trees	Tuolumne	4,938
Elkhorn Peak	Carquinez	Solano	1,315
Ellis Peak	Truckee	Placer	8,745
El Paso Peaks	Randsburg	Kern	4,598
Elsinore Lake, water surface	Elsinore	Riverside	1,220
El Tranquillon triangulation station	Guadalupe	Santa Barbara	2,170
Elwell, Mount	Downieville	Plumas	7,846
Emerald Peak	Mount Goddard	Fresno	12,517
Emerson	do	Inyo	13,226
Emily Mountain	Seiad	Siskiyou	6,100
Emma Mountain	Bridgeport	Mono	10,529
Emma Mountain	Tujunga	Los Angeles	5,068
English Mountain	Colfax	Nevada	8,404
Ericsson, Mount	Mount Whitney	Tulare	13,625
Espinosa Lake, water surface	Salinas Valley, sheet 1	Monterey	13
Estelle Mountain	Elsinore	Riverside	2,826
Estelle Mountain	Riverside	do	2,826
Evans Peak	Indian Valley Special	Plumas	5,308
Evolution Lake, water surface	Mount Goddard	Fresno	10,990
Excelsior Mountain	Bridgeport	Mono-Tuolumne	12,440
F			
Fairview Dome	Mount Lyell [1]	Tuolumne	9,746
Fall Creek Mountain	Colfax	Nevada	7,532
Farewell Gap	Kaweah	Tulare	10,588
Fernandez Pass	Mount Lyell [1]	Madera	10,588
Figurehead Mountain	Seiad	Siskiyou	6,410
Fillmore Mountain	Downieville	Sierra	7,816
Fin Dome	Mount Whitney	Fresno	11,627
Findley Peak	Colfax	Nevada	7,470
Finger Peak	Mount Goddard	Fresno	12,401
Finger Peaks	Bridgeport	Tuolumne	11,491
Finger Rock	Tehipite	Fresno	9,627
Fish Spring Hill	Bishop	Inyo	5,450
Fish Valley Peak	Dardanelles	Alpine-Mono	10,543
Fiske Mountain	Mount Goddard	Fresno-Inyo	13,328
Flanly Peak	Smartsville	Yuba	2,125
Flat Iron Ridge	Bridgeport	Mono	11,186
Florence Peak	Kaweah	Tulare	12,405
Flume Peak	Kaiser	Fresno	5,972
Foerster Peak	Mount Lyell [1]	Madera	12,071
Folger Peak	Dardanelles	Alpine	9,700
Fort Bidwell	Alturas	Modoc	4,740
Foster Mountain	Placerville	Eldorado	2,382
Four Gables	Mount Goddard	Fresno-Inyo	12,759
Fox Mountain	Santa Ynez	Santa Barbara	5,154

[1] In accordance with latest level-adjustment data 9 feet has been added to all elevations on Mount Lyell map.

[2] In accordance with latest level-adjustment data 85 feet has been subtracted from all elevations on Yosemite map.

Locality	Quadrangle	County	Elevation
			Feet
Franklin Hill	Bidwell Bar	Plumas	6,132
Frazier Mountain triangulation station	Tejon	Ventura	8,026
Fredonyer Peak	Honey Lake	Lassen	7,995
Freel Peak	Markleeville	Alpine-Eldorado	10,900
French Hill triangulation station	Santa Ana	Orange	433
Frenchman Hill	Bidwell Bar	Plumas	5,993
Fullerton	Anaheim	Orange	158
Funeral Peak	Furnace Creek	Inyo	6,397
G			
Gabb Mountain	Mount Goddard	Fresno	13,701
Gale Peak	Mount Lyell [1]	Madera	10,699
Gardner Mountain	Mount Whitney	Fresno	12,903
Garrity Peak triangulation station	San Simeon	San Luis Obispo	2,351
Gaskill Peak	Cuyamaca	San Diego	3,860
Gavilan Peak	Riverside	Riverside	2,439
Gaviota Peak	Lompoc	Santa Barbara	2,451
Gay Mountain	San Luis Obispo	San Luis Obispo	2,850
Genesee	Genesee	Plumas	3,688
Geneva Mountain	Mount Whitney	Tulare	13,037
George Mountain	Napa	Napa	1,888
Gibbs Mountain	Mount Lyell [1]	Mono-Tuolumne	12,709
Gilbert Mountain	Mount Goddard	Fresno-Inyo	13,232
Giroud Peak	do	Fresno	12,539
Glacier Monument	Tehipite	do	9,903
Glacier Point	Yosemite Valley map	Mariposa	7,214
Glass Mountain	Modoc Lava Bed	Siskiyou	7,850
Glass Mountain triangulation station	Mount Morrison	Mono	11,127
Gleason Mountain triangulation station	Tujunga	Los Angeles	6,503
Goat Island	San Francisco	San Francisco	343
Goddard Mountain	Mount Goddard	Fresno	13,555
Goff Mountain	Seiad	Siskiyou	5,671
Gold Hill	Furnace Creek	Inyo	5,460
Golden Gate Hill	Jackson	Calaveras	2,093
Goodale Mountain	Mount Whitney	do	12,767
Goode, Mount	Mount Goddard	Fresno	13,312
Goose Lake, water surface	Alturas	Modoc	4,800
Goose Nest Mountain	Shasta	Siskiyou	8,447
Gordon Mountain triangulation station	Preston Peak	Del Norte	4,170
Gould Mountain	Mount Whitney	Inyo-Fresno	13,001
Government Peak triangulation station	Randsburg	Kern	4,755
Granite Dome	Dardanelles	Tuolumne	10,300
Granite Mountain	Mount Morrison	Mono	8,921
Granite Pass	Tehipite	Fresno	11,333
Granite Peak	Weaverville	Trinity	8,378
Grass Valley Hill	Downieville	Plumas	6,196
Graveyard Peak	Mount Goddard	Fresno	11,584
Gray Peak	Mount Lyell [1]	Madera	11,590
Gray Rocks	Redding	Shasta	2,422
Green Peak	Port Harford	San Luis Obispo	1,370
Grey Butte	Bridgeport	Tuolumne	11,333
Grizzly Mountains	Indian Valley Special	Plumas	7,741
Grizzly Peak	Concord	Alameda-Contra Costa	1,759
Grizzly Peak	Downieville	Plumas	7,678
Grizzly Peak	Modoc Lava Bed	Shasta	6,804
Grizzly Peak	Yosemite Valley map	Mariposa	6,219
Grizzly Point	Yosemite [2]	do	7,082
Grouse Mountain	Bridgeport	Mono	10,764
Grouse Mountain	Mount Goddard	Inyo	8,075
Gunsight Peak	Weaverville	Trinity	5,774
Guyot Mountain	Mount Whitney	Tulare	12,305
H			
Hackett Peak	Olancha	Tulare	8,620
Haeckel, Mount	Mount Goddard	Fresno-Inyo	13,422
Hagerman Peak	Pacheco Pass	SantaClara	1,788
Half Dome	Yosemite Valley map	Mariposa	8,852
Hamilton, Mount	Mount Hamilton	Santa Clara	4,209
Hanlon, Mount	Gonzales	San Benito	3,262
Hanna Mountain	Bridgeport	Mono	11,489
Harmon Peak	Jackson	Calaveras	2,606
Harrington Mountain	Tehipite	Fresno	11,001
Harrison Mountain	Redlands	San Bernardino	4,740
Harvard Mountain	Pasadena	Los Angeles	5,433
Hat Peak	Alturas	Lassen	7,676
Hawkins Peak	Markleeville	Alpine	10,060
Haystack Mountain	Indio Special	Riverside	3,802
Haystack Peak	Dardanelles	Tuolumne	9,966
Haywards Station	Haywards	Alameda	70

[1] In accordance with latest level-adjustment data 9 feet has been added to all elevatons on Mount Lyell map.

[2] In accordance with latest level-adjustment data 85 feet has been subtracted from all elevations on Yosemite map.

Locality	Quadrangle	County	Elevation
			Feet
Hedges triangulation station	Yuma	San Diego	2,225
Heins Lake, water surface	Salinas Valley, sheet 1	Monterey	50
Helen Lake, water surface	Mount Goddard	Fresno	11,612
Helix Mountain	Elcajon	San Diego	1,380
Hemet Butte	San Jacinto	Riverside	2,312
Hennerville Peak	Bridgeport	Mono	11,754
Henrietta Peak triangulation station	Quien Sabe	San Benito	3,626
Henry Mountain	Mount Goddard	Fresno	12,197
Henry Peak	Dardanelles	Alpine	9,309
Hermit Peak	Mount Goddard	Fresno	12,341
Hicks Mountain	Petaluma	Marin	1,532
High Plateau Mountain	Preston Peak	Del Norte	3,501
Highland Peak	Markleeville	Alpine	10,955
Highland Reservoir, water surface	Dardanelles	do	6,816
Hildreth Peak	Santa Ynez	Santa Barbara	5,040
Hilgard Mountain	Mount Goddard	Fresno	13,351
Hines Peak triangulation station	Mount Pinos	Ventura	6,704
Hirz Mountain	Redding	Shasta	3,600
Hoffman Mountain	Modoc Lava Bed	Siskiyou	6,794
Hoffman Mountain triangulation station	Yosemite [2]	Tuolumne	10,836
Hog Mountain	Sonora	do	2,533
Hollister Peak	Cayucos	San Luis Obispo	1,415
Homers Nose	Kaweah	Tulare	9,005
Hoodley Peak	Weaverville	Shasta-Trinity	4,557
Hopkins, Mount	Mount Goddard	Fresno	12,300
Horn Mountain	Kaweah	Tulare	4,434
Horse Mountain	Redding	Shasta	4,040
Horsethief Flat	San Gorgonio	San Bernardino	6,304
Honey Lake, water surface	Honey Lake	Lassen	3,949
Hough Peak	do	Plumas	7,254
Huckleberry Hill	Monterey	Monterey	815
Humphreys Mountain	Mount Goddard	Fresno-Inyo	13,972
Huntington Mountain	do	Fresno-Mono	12,393
Hutchings Mountain	Tehipite	Fresno	10,787
Huxley, Mount	Mount Goddard	do	13,124
I			
Iceberg Peak	Dardanelles	Alpine	9,751
Inconsolable Range	Mount Goddard	Inyo	13,210
Independence Peak	Mount Whitney	do	11,773
Indian Head	Olancha	Tulare	9,100
Indian Knob	Arroyo Grande	San Luis Obispo	880
Indian Rock	Yosemite Valley map	Mariposa	8,526
Indian Springs Hill	Smartsville	Nevada	2,231
Ingalls Mountain	Downieville	Plumas	8,377
Iron Mountain	Bishop	Mono	9,530
Iron Mountain	Fernando	Los Angeles	4,856
Iron Mountain	Mount Lyell [1]	Madera	11,166
Iron Mountain	San Antonio	Los Angeles	8,028
Iron Mountain	Tujunga	Los Angeles	5,637
Isabel Mountain	Mount Hamilton	Santa Clara	4,223
Isberg Peak	Mount Lyell [1]	Madera	11,009
Island Bar Hill	Bidwell Bar	Butte	2,850
Island Mountain	Jamesburg	Monterey	3,169
Islay Hill	Arroyo Grande	San Luis Obispo	775
Italy Lake, water surface	Mount Goddard	Fresno	11,135
J			
Jackass Rock	Kaiser	Madera	7,109
Jacks Hill	Quien Sabe	San Benito	2,294
Jacks Peak	Pyramid Peak	Eldorado	9,910
Jackson Butte	Jackson	Amador	2,348
Jackson Mountain	Bridgeport	Mono	9,372
Jackson Mountain	Downieville	Plumas	6,625
Jamul Butte	Cuyamaca	San Diego	1,456
Joaquin Mountain	Jackson	Calaveras	2,831
Joes Peak	Weaverville	Trinity	4,561
Johnson Mountain triangulation station	Gonzales	San Benito	3,453
Jones Butte	Jackson	Amador	665
Jones Mountain triangulation station	Cape San Martin	Monterey	2,723
Josephine Mountain triangulation station	Tujunga	Los Angeles	5,520
Junction Butte	Mount Lyell [1]	Madera	6,579
Junction Peak	Mount Whitney	Inyo-Tulare	13,903
June Lake, water surface	Mount Lyell [1]	Mono	7,640
Juniper Ridge	Coalinga	Fresno	2,869
Junipero Serra Peak triangulation station	Junipero Serra	Monterey	5,844
Jura Mountain	Genesee	Plumas	6,300
Jurupa triangulation station	San Bernardino	Riverside	2,620

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[2] In accordance with latest level-adjustment data 85 feet has been subtracted from all elevations on Yosemite map.

Locality	Quadrangle	County	Elevation
			Feet
K			
Kaiser Peak	Kaiser	Fresno	10,300
Kanaka Peak	Bidwell Bar	Butte	3,060
Kaweah Peaks	Mount Whitney-Tehipite.	Tulare	13,816
			13,728
			13,754
			13,752
			13,434
Kearsarge Pass	Mount Whitney	Inyo-Fresno	11,823
Keith Mountain	do	Inyo-Tulare	13,990
Keller Peak	Redlands	San Bernardino	7,863
Kennedy Lake, water surface	Dardanelles	Tuolumne	7,820
Kennedy Mountain	Tehipite	Fresno	11,424
Kennedy Peak	Dardanelles	Tuolumne	10,677
Kern Peak triangulation station	Olancha	Tulare	11,493
Kern Ridge	Mount Whitney	do	13,206
Kettle Dome	Tehipite	Fresno	9,452
Kettle Peak	Bridgeport	Mono	11,040
Kettle Peak	Tehipite	Tulare	10,038
Kettle Rock	Indian Valley Special	Plumas	7,849
Kibbie Lake, water surface	Dardanelles	Tuolumne	6,385
Kickham Peak	Gilroy Hot Springs	Santa Clara	2,339
King Mountain	Mount Whitney	Fresno	12,909
Kings Castle	Seiad	Siskiyou	7,396
Kirby Hill	Antioch	Solano	361
Klinker Mountain	Randsburg	San Bernardino	4,570
Knob Hill	Bakersfield Special	Kern	1,118
L			
La Canada	Los Angeles	Los Angeles	1,378
La Cumbre Peak	Santa Barbara	Santa Barbara	3,985
Lady Bug Peak	Truckee	Sierra	8,361
Lafferty Peak	Smartsville	Yuba	1,154
Laguna Peak	Hueneme	Ventura	1,447
Lagunitas Lake, water surface	Tamalpais	Marin	820
Lake Chabot, water surface	Carquinez	Solano	77
Lake Mountain	Gilroy Hot Springs	Santa Clara	1,884
Lake Tahoe, water surface	Truckee	Eldorado-Placer	6,225
Lakeview Mountain triangulation station	Elsinore	Riverside	2,626
La Mesa Reservoir	La Jolla	San Diego	485
Lamarck Mountain	Mount Goddard	Fresno-Inyo	13,202
Lancaster Mountain triangulation station	San Luis Rey	do	1,470
Langille Peak	Mount Goddard	Fresno	11,981
Langley Hill	Palo Alto	San Mateo	2,242
Langley Mountain	Mount Whitney	Inyo-Tulare	14,042
La Panza Range triangulation station	Pozo	San Luis Obispo	3,771
Las Aguilas Mountain	San Benito	San Benito	3,275
Lassen Peak	Lassen Peak	Shasta	10,437
Laurel Mountain	Mount Morrison	Mono	11,800
Laurel Mountain	Randsburg	Kern	4,493
Laveaga Peak	Quien Sabe	Merced-San Benito	3,801
Leaning Tower	Yosemite Valley map	Mariposa	5,863
Leavitt Peak	Dardanelles	Mono-Tuolumne	11,575
Le Conte Mountain	Mount Whitney	Inyo-Tulare	13,960
Leek Spring Hill	Pyramid Peak	Amador	7,640
Leevining Peak	Mount Lyell [1]	Mono	11,700
Leviathan Peak	Markleeville	Alpine	8,985
Lewis, Mount	Big Trees	Tuolumne	5,474
Lewis Mountain	Mount Hamilton	Santa Clara	3,764
Liberty Cap	Yosemite Valley map	Mariposa	7,072
Liebre Mountain	Tejon	Los Angeles	5,791
Lily Rock	San Jacinto	Riverside	7,973
Limestone Point	Downieville	Plumas	5,811
Lincoln Mountain	Truckee	Placer	8,403
Linn Mountain	Red Bluff	Tehama-Trinity	8,604
Lion Point	Mount Lyell [1]	Madera	8,849
Lippincott Mountain	Tehipite	Tulare	12,263
Little Grayback	Preston Peak	Del Norte-Siskiyou	6,140
Little Shuteye Peak	Kaiser	Madera	7,902
Little Tecote Mountain	Cuyamaca	San Diego	2,400
Loara	Anaheim	Orange	130
Lola Mountain triangulation station	Truckee	Nevada	9,167
Loma Alta	Monterey	Monterey	1,080
Loma Alta	Petaluma	Marin	1,585
Loma Alta Mountain	Oceanside	San Diego	497
Loma Paloma Summit	Santa Ynez	Santa Barbara	4,439
Lone Pine Peak	Mount Whitney	Inyo	12,951
Long Mountain	Mount Lyell [1]	Madera	11,477
Long Valley Peak	Cuyamaca	San Diego	4,925
Lookout Mountain	Lompoc	Santa Barbara	3,490
Lookout Mountain	Mount Goddard	Inyo	11,285
Lookout Mountain	Preston Peak	Siskiyou-Del Norte	6,375

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Locality	Quadrangle	County	Elevation
			Feet
Lookout Mountain	Olancha	Tulare	9,826
Lookout Mountain	Quien Sabe	Merced	1,827
Lookout Peak	Tehipite	Fresno	8,547
Lookout Peak	Weaverville	Shasta	5,710
Loper Peak	Mount Goddard	Fresno	10,059
Lopez Mountain	San Luis Obispo	San Luis Obispo	2,860
Los Cerritos triangulation station	Downey	Los Angeles	364
Los Coches	Lompoc	Santa Barbara	3,004
Los Pinos Mountain	Cuyamaca	San Diego	4,804
Los Pinos Peak	Elsinore	Orange	4,525
Lost Cannon Peak	Dardanelles	Mono	11,068
Lost Lake, water surface	Yosemite Valley map	Mariposa	6,146
Lovers Leap	Pyramid Peak	Eldorado	6,985
Lowe Mountain	Pasadena	Los Angeles	3,219
Lower Klamath Lake, water surface	Modoc Lava Bed	Siskiyou	4,175
Luna Mountain	Deep Creek	San Bernardino	5,984
Lundy Lake, water surface	Bridgeport	Mono	7,766
M			
McDonald Peak	Honey Lake	Lassen	7,954
McDonald Peak	Tejon	Ventura	6,855
McGee Mountain	Mount Morrison	Mono	10,545
McGee Mountain	Mount Goddard	Fresno	12,966
McGinty Mountain	Cuyamaca	San Diego	2,306
McKesick Peak	Honey Lake	Lassen-Plumas	7,083
McKinley Mountain triangulation station	Santa Ynez	Santa Barbara	6,228
McKinstry Peak	Truckee	Eldorado	7,918
McPhails Peak	Gonzales	Monterey-San Benito	3,335
McPherson Peak triangulation station	Santa Ynez	Santa Barbara	5,763
Maddox Mountain	Tehipite	Tulare	9,723
Magee Peak	Lassen Peak	Shasta	7,494
Maggies Peak	Pyramid Peak	Eldorado	8,725
Mammoth Mountain	Mount Lyell [1]	Madera-Mono	11,043
Manzanita Mountain	Lompoc	Santa Barbara	3,125
Marble Point	Kaiser	Fresno	8,860
Margarita Mountains	San Luis Rey	San Diego	3,187
Marie Lake, water surface	Mount Goddard	Fresno	10,595
Marion Peak	Tehipite	do	12,686
Mariposa Peak	Quien Sabe	Merced-San Benito	3,468
Markham Mountain	Pasadena	Los Angeles	5,760
Markleeville Peak	Markleeville	Alpine	9,465
Martha Lake, water surface	Mount Goddard	Fresno	11,007
Martinez Mountain	Indio Special	Riverside	6,539
Marysville Buttes:			
North Butte	Marysville Buttes	Sutter	1,863
South Butte	do	do	2,128
West Butte	do	do	1,681
Masonic Mountain	Bridgeport	Mono	9,219
Masters Hill	Mount Hamilton	Santa Clara	2,427
Matterhorn Peak	Bridgeport	Mono-Tuolumne	12,281
Maturango Peak	Ballarat	Inyo	8,850
Maxson Dome	Mount Goddard	Fresno	9,538
Mayfield	Palo Alto	Santa Clara	28
Medicine Lake, water surface	Modoc Lava Bed	Siskiyou	6,794
Merced Lake, water surface	San Mateo	San Francisco	19
Merced Pass	Mount Lyell [1]	Madera	9,304
Merced Peak	do [1]	do	11,731
Merriam Mountains	Escondido	San Diego	1,616
Mesa Peak	Calabasas	Los Angeles	2,050
Messic Mountain	Hollister	San Benito	1,808
Middle Palisade	Bishop	Fresno-Inyo	14,049
Mikes Peak	Weaverville	Trinity	4,779
Mildred Mountain	Truckee	Placer	8,400
Milestone Bow	Mount Whitney	Tulare	13,560
Milestone Mountain	do	do	13,643
Mill Peak	Redlands	San Bernardino	6,775
Mills Mountain	Mount Goddard	Fresno-Inyo	13,352
Minarets	Mount Lyell [1]	Madera	12,287
Mindego Hill	Palo Alto	San Mateo	2,127
Minnesota Mountain	Redding	Shasta	4,292
Mirror Lake, water surface	Yosemite Valley map	Mariposa	4,096
Mission Point	Santa Susana	Los Angeles	2,785
Mitchell Peak	Tehipite	Tulare	10,375
Moccasin Peak	Sonora	Tuolumne	2,967
Mocho triangulation station	Mount Hamilton	Santa Clara	4,074
Mokelumne Peak	Pyramid Lake	Amador	9,371
Monache Mountain	Olancha	Tulare	9,484
Monkey Creek Ridge	Preston Peak	Del Norte	3,701
Mono Crater	Mount Lyell [1]	Mono	9,173
Mono Dome	do [1]	do	10,621
Mono Lake, water surface, July, 1898	Bridgeport	do	6,421

[1] In accordance with latest level-adjustment data 9 feet has been added to all elevations in Mount Lyell map.

Locality	Quadrangle	County	Elevation
			Feet
Mono Lake, water surface, Oct., 1909	Bridgeport	Mono	6,426
Monrovia Hill	Pomona	Los Angeles	5,267
Montecito Peak	Santa Barbara	Santa Barbara	3,231
Montecito triangulation station	Mount Pinos	do	6,025
Monument Peak	Riverside	Riverside	2,336
Monument Peak	San Jose	Alameda-Santa Clara	2,591
Moraine Dome	Yosemite Valley map	Mariposa	8,012
Moraine Mountain	Mount Lyell [1]	Madera	9,759
Moraine Mountain	Tehipite	Tulare	10,400
Morena Butte	Cuyamaca	San Diego	3,927
Morgan Mountain	Mount Goddard	Inyo	13,739
Moro Rock	Tehipite	Tulare	6,719
Morro Hill triangulation station	San Luis Rey	San Diego	940
Morro Rock	Cayucos	San Luis Obispo	576
Moses Mountain	Kaweah	Tulare	9,305
Mount Baldwin	Mount Morrison	Mono	12,595
Mount Diablo	Mount Diablo	Contra Costa	3,849
Mount Lyell	Mount Lyell [1]	Madera-Mono-Tuolumne.	13,099
Mount Morgan	Mount Morrison	Mono	12,984
Mount Morrison	do	do	12,245
Mount Pleasant	Bidwell Bar	Plumas	7,111
Mount Tom	Mount Goddard	Inyo	13,649
Mount Tom	Kaiser	Fresno	9,022
Mount Whitney [4]	Mount Whitney	Inyo-Tulare	14,501
Mountain View	Palo Alto	Santa Clara	73
Muir Mountain	Mount Whitney	Inyo-Tulare	14,025
Muir Pass	Mount Goddard	Fresno	12,059
Mule Mountain	Weaverville	Shasta	2,306
Mulholland Hill	Concord	Contra Costa	1,156
Mulligan Hill	Mount Diablo	do	1,439
Muriel Lake, water surface	Mount Goddard	Fresno	11,527
Music Peak	Kaiser	do	6,820
Mustang Peak	Gilroy Hot Springs	Santa Clara-Stanislaus	2,272
N			
Nawtawakit Mountain triangulation station	Redding	Shasta	5,355
Needham Mountain	Kaweah	Tulare	12,470
Nelson Mountain	Kaiser	Fresno	10,213
Newark	Haywards	Alameda	21
Nichols Peak	Kernville	Kern	6,078
Niguel Hill	Corona	Orange	930
Nipomo Hill	Arroyo Grande	San Luis Obispo	406
Nipple	Markleeville	Alpine	9,390
Noon Peak	Ventura	Santa Barbara	4,101
Nopah Range	Furnace Creek	Inyo	6,415
Nordhoff Peak	Santa Paula	Ventura	4,477
North Dome	Tehipite	Fresno	8,657
North Dome	Yosemite Valley map	Mariposa	7,531
North Guard	Mount Whitney	Tulare	13,304
North Mountain	Tehipite	Fresno	8,642
North Palisade	Mount Goddard	Fresno-Inyo	14,254
North Peak	Mount Diablo	Contra Costa	3,849
North Peak	Mount Lyell [1]	Mono-Tuolumne	12,265
Norwall	Downey	Los Angeles	99
O			
Oak Ridge	Piru	Ventura	2,878
Oat Mountain	Camulos	do	3,111
Oat Mountain	Piru	do	3,111
Obelisk Summit	Tehipite	Fresno	9,707
O'Brien Mountain	Redding	Shasta	2,773
Olancha Peak	Olancha	Inyo-Tulare	12,135
Old Inspiration Point	Yosemite Valley map	Mariposa	6,603
Olds Mountain	Gonzales	Monterey	3,005
Ontario Peak	Cucamonga	San Bernardino	8,752
Orange	Anaheim	Orange	176
Orcum Mountain	Placerville	Eldorado	2,654
Orleans Mountain	Sawyers Bar	Siskiyou-Trinity	6,184
Ortigalita Peak	Panoche	Merced	3,300
Oso Mountain triangulation station	Carbona	Stanislaus	3,355
Ostrander Rocks	Yosemite [2]	Mariposa	8,183
Otay Mountain	Cuyamaca	San Diego	3,572
Owens Lake, water surface	Mount Whitney-Olancha.	Inyo	3,569
Owens Point	Mount Whitney	do	11,428

[1] In accordance with latest level-adjustment data 9 feet has been added to all elevations on Mount Lyell map.

[2] In accordance with latest level-adjustment data 85 feet has been subtracted from all elevations on Yosemite map.

[4] Mount Whitney is the highest point in the United States exclusive of Alaska.

Locality	Quadrangle	County	Elevation
			Feet
Ox Hill	San Mateo	San Mateo	1,680
Oyster Point	Mount Diablo	Contra Costa	2,122
P			
Pachappa Hill	Riverside	Riverside	1,180
Pacheco Pass	Pacheco Pass	Merced-Santa Clara	1,386
Pacheco Peak	Gilroy Hot Springs	Santa Clara	2,772
Pacifico Mountain	Tujunga	Los Angeles	7,078
Paiute Monument	Mount Whitney	Inyo	8,354
Palmer Mountain	Tehipite	Fresno	10,085
Palo Alto	Palo Alto	Santa Clara	57
Palomar Mountain triangulation station	Ramona	San Diego	6,126
Panochita Hill	Mount Hamilton	Santa Clara	1,884
Panorama Point	Yosemite Valley map	Mariposa	6,224
Panther Peak	Tehipite	Tulare	9,044
Parker Mountain	Tujunga	Los Angeles	4,136
Parker Peak	Mount Lyell [1]	Mono	12,859
Pasadena	Pasadena	Los Angeles	850
Patterson Mountain	Bridgeport	Mono	11,654
Pavilion Dome	Mount Goddard	Fresno	11,355
Peak Mountain triangulation station	Santa Ynez	Santa Barbara	5,837
Peeler Lake, water surface	Bridgeport	Mono	9,531
Penman Peak	Downieville	Plumas	7,280
Perkins Mountain	Mount Whitney	Inyo-Fresno	12,557
Picacho Hill	Arroyo Grande	San Luis Obispo	902
Picacho Peak triangulation station	Yuma	San Diego	1,945
Picket Guard Peak	Mount Whitney	Tulare	12,311
Pico Blanco triangulation station	Point Sur	Monterey	3,710
Pike County Peak triangulation station	Smartsville	Yuba	3,675
Pike Mountain	do	Nevada	1,842
Pilarcitos Lake, water surface	San Mateo	San Mateo	692
Pilot Knob	Kernville	Kern	6,212
Pilot Knob triangulation station	Yuma	San Diego	887
Pilot Peak	Downieville	Plumas	7,505
Pilot Peak triangulation station	Yosemite [2]	Mariposa-Tuolumne	6,030
Pinchot Mountain	Mount Whitney	Fresno	13,471
Pincushion Peak	Kaiser	do	9,817
Pine Hill	Placerville	Eldorado	2,056
Pine Mountain	Tujuna	Los Angeles	5,903
Pine Mountain triangulation station	San Simeon	San Luis Obispo	3,594
Pine Mountain triangulation station	San Antonio	San Bernardino	9,661
Pine Ridge	Mount Hamilton	Santa Clara	3,626
Piney Ridge triangulation station	San Luis Obispo	San Luis Obispo	2,845
Pinnacle Rocks	Metz	San Benito	2,685
Pinnacles	Mount Goddard	Fresno	12,105 12,264
Pinoche Peak	Yosemite [2]	Mariposa	5,759
Pinto Peak	Ballarat	Inyo	7,450
Pinyon Peak	Point Sur	Monterey	2,237
Piute Mountain	Dardanelles	Tuolumne	10,489
Piute Pass	Mount Goddard	Fresno-Inyo	11,409
Polly Butte	San Jacinto	Riverside	3,360
Pony Peak	Preston Peak	Siskiyou	5,409
Poso Mountain	Bakersfield Special	Kern	1,215
Post Peak	Mount Lyell [1]	Madera	11,005
Potato Hill	Kaweah	Tulare	2,884
Potato Hill	Tehama	Tehama	1,261
Potato Peak triangulation station	Bridgeport	Mono	10,226
Potatoe Mountain	Sawyers Bar	Siskiyou-Trinity	6,660
Potrero Hills	Antioch	Solano	418
Potrero Peak	Quien Sabe	San Benito	3,747
Potrero Peak	Cuyamaca	San Diego	3,353
Powell Mountain	Mount Goddard	Inyo-Fresno	13,361
Preston Peak triangulation station	Preston Peak	Siskiyou	7,310
Promontory Point	Chico	Tehama	3,627
Provo Mount	Big Trees	Tuolumne	4,862
Puente Hills	Los Angeles	do	1,182
Puente triangulation station	Pomona	Los Angeles	1,476
Puente Hills	Anaheim	do	1,413
Pulpit Rock	Yosemite Valley map	Mariposa	4,195
Pumice Butte	Mount Lyell [1]	Madera	9,527
Pyramid Peak	Furnace Creek	Inyo	6,725
Pyramid Peak	Mount Whitney	Fresno	12,740
Pyramid Peak	Seiad	Siskiyou	6,480
Pyramid Peak triangulation station	Pyramid Peak	Eldorado	10,020
Pyramid Rock	Mount Hamilton	Santa Clara	4,014
Q			
Quarry Hill	Riverside	Riverside	1,163
Quarry Peak	Bridgeport	Tuolumne	11,162
Quarter Domes	Yosemite Valley map	Mariposa	8,160

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[2] In accordance with latest level-adjustment data 85 feet has been subtracted from all elevations on Yosemite map.

Locality	Quadrangle	County	Elevation
			Feet
Quartz Mountain	Mount Lyell [1]	Madera	9,035
Quartz Mountain	Sonora	Tuolumne	1,705
Quartzite Peak	Furnace Creek	Inyo	5,060
Quincy	Downieville	Plumas	3,407
R			
Rabbit Peak	Indio Special	Riverside	6,650
Rae Lake, water surface	Mount Whitney	Fresno	10,560
Rafferty Peak	Mount Lyell [1]	Mariposa-Tuolumne	11,187
Ragged Peak	do [1]	Tuolumne	10,867
Rattlesnake Mountain	Seiad	Siskiyou	6,304
Rattlesnake Mountain triangulation station	Preston Peak	Del Norte	3,630
Rattlesnake Peak	Rock Creek	Los Angeles	5,855
Raymond Mountain	Yosemite [2]	Madera	8,461
Raymond Peak	Markleeville	Alpine	10,075
Recess Peak	Mount Goddard	Fresno	12,841
Red and White Mountain	do	Fresno-Mono	12,840
Red Butte triangulation station	Seiad	Siskiyou	6,737
Red Hill	Bakersfield Special	Kern	1,792
Red Hill	Santa Ana	Orange	325
Red Hill	Tamalpais	Marin	502
Red Lake Peak	Markleeville	Alpine	9,950
Red Mountain	Kaiser	Fresno	9,984
Red Mountain	Mount Morrison	Mono	11,461
Red Mountain	Escondido	San Diego	1,810
Red Mountain	Bishop	Inyo	5,201
Red Mountain	Mount Goddard	Fresno	11,933
Red Mountain	San Simeon	San Luis Obispo	2,058
Red Mountain	Tejon	Los Angeles	4,007
Red Mountain	Ventura	Ventura	2,158
Red Mountain	Weaverville	Trinity	7,906
Red Mountain triangulation station	Preston Peak	Del Norte	4,305
Red Mountain triangulation station	Seiad	Siskiyou	8,317
Red Mountain triangulation station	Randsburg	San Bernardino	5,270
Red Peak	Dardanelles	Alpine	9,751
Red Peak	Bridgeport	Tuolumne	11,968
Red Peak	Mount Lyell [1]	Madera	11,709
Red Peak	Truckee	Eldorado	7,918
Red Slate Mountain triangulation station	Mount Morrison	Fresno-Mono	13,152
Redrock Mountain	Lompoc	Santa Barbara	1,968
Redwood Peak	Concord	Alameda	1,608
Reinoso Peak triangulation station	Quien Sabe	San Benito	3,480
Reinstein Mountain	Mount Goddard	Fresno	12,595
Relief Peak	Dardanelles	Tuolumne	10,738
Reversed Peak	Mount Lyell [1]	Mono	9,471
Reyes Peak	Mount Pinos	Ventura	7,488
Richardson Peak	Dardanelles	Tuolumne	9,845
Rickey Peak	Bridgeport	Mono	10,124
Rincon Mountain	Ventura	Ventura	2,165
Ritter Mountain	Mount Lyell [1]	Madera	13,165
Rivera	Downey	Los Angeles	154
Rixford Mountain	Mount Whitney	Fresno	12,856
Robbs Peak	Pyramid Peak	Eldorado	6,725
Robinson Peak	Bridgeport	Mono	10,823
Rock Creek Lake, water surface	Mount Goddard	Inyo	9,727
Rock Mountain triangulation station	Smartsville	Nevada	1,392
Rocky Butte triangulation station	San Simeon	San Luis Obispo	3,438
Rodgers Peak	Mount Lyell [1]	Madera	13,065
Rose Lake, water surface	Mount Goddard	Fresno	10,672
Round Hill	Placerville	Eldorado	2,565
Round Hill	Shasta	Siskiyou	5,270
Round Mountain	Hueneme	Ventura	552
Round Mountain	Lassen Peak	Shasta	3,439
Round Mountain	Bakersfield Special	Kern	1,616
Round Mountain	Olancha	Inyo-Tulare	9,944
Round Mountain triangulation station	Bishop	Inyo	11,165
Round Top	Arroyo Grande	San Luis Obispo	2,036
Round Top	Concord	Contra Costa	1,750
Round Top	Pyramid Peak	Alpine	10,430
Round Valley Peak	Mount Goddard	Inyo	11,931
Round Valley Reservoir, water surface	Honey Lake	Plumas	4,480
Rubicon Peak	Pyramid Peak	Eldorado	9,193
Rubidoux	Riverside	Riverside	1,337
Russell, Mount	Mount Whitney	Inyo-Tulare	14,190
Russell Mountain	Elsinore	Riverside	2,686
S			
Saddleback, Mount	Downieville	Los Angeles	6,760
Saddle Mountain	Kaiser	Fresno	11,200
Saddle Mountain	Placerville	Eldorado	5,245

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Locality	Quadrangle	County	Elevation
			Feet
Saddle Peak	Calabasas	Los Angeles	2,836
Saddle Peak triangulation station	Port Harford	San Luis Obispo	1,836
Sadlier Peak	Mount Lyell [1]	Madera	10,571
Sage Hen Hill	Redding	Shasta	2,490
St. John Mountain	Napa	Napa	2,370
Salmon Mountain triangulation station	Sawyers Bar	Siskiyou-Trinity	6,934
Salt Creek Mountain	Redding	Shasta	4,483
Sampson triangulation station	Dinuba	Fresno	4,650
San Andreas	Jackson	Calaveras	1,000
San Andreas Lake, water surface	San Mateo	San Mateo	445
San Antonio Peak	San Antonio	Los Angeles-San Bernardino.	10,080
San Bernardino Mountain triangulation station.	San Gorgonio	San Bernardino	10,630
San Bruno Mountain	San Mateo	San Mateo	1,315
San Cayetano Mountain	Camulos	Ventura	4,122
San Felipe Hills	Mount Hamilton	Santa Clara	3,314
San Gabriel Peak	Pasadena	Los Angeles	6,152
San Gorgonio	San Gorgonio	San Bernardino	11,485
San Jacinto Peak triangulation station	San Jacinto	Riverside	10,805
San Joaquin Hill triangulation station	Santa Ana	Orange	1,185
San Joaquin Peak	Hollister	San Benito	2,877
San Jose triangulation station	Pomona	Los Angeles	1,380
San Juan Hill	Corona	Orange-San Bernardino.	1,780
San Leandro	Haywards	Alameda	44
San Luis Hill triangulation station	Port Harford	San Luis Obispo	704
San Luis Obispo	San Luis Obispo	do	243
San Marcos Mountains	Escondido	San Diego	1,664
San Marcos Pass	Goleta Special	Santa Barbara	2,224
San Martin Top triangulation station	Cape San Martin	Monterey	2,825
San Mateo	San Mateo	San Mateo	22
San Miguel Mountain	Cuyamaca	San Diego	2,573
San Onofre Mountain triangulation station	San Luis Rey	do	1,735
San Pedro Hill triangulation station	San Pedro	Los Angeles	1,482
San Pedro Hills	Redondo	do	1,352
San Rafael Mountain triangulation station	Santa Ynez	Santa Barbara	6,581
San Ramon	Mount Diablo	Contra Costa	470
San Ysidro Mountain	Indio Special	San Diego	5,873
Sandstone Peak	Triunfo Pass	Ventura	3,059
Sanger Peak	Preston Peak	Del Norte	5,844
Santa Ana	Santa Ana	Orange	133
Santa Ana Mountain	Hollister	San Benito	3,112
Santa Lucia Range	Arroyo Grande	San Luis Obispo	2,831
Santa Margarita	San Luis Obispo	do	998
Santa Paula Peak	Santa Paula	Ventura	4,959
Santa Rosa Mountain	Indio Special	Riverside	8,046
Santa Susana Mountains	Camulos	Los Angeles	3,756
Santa Susana Pass	Santa Susana	Los Angeles-Ventura	1,604
Santa Ynez Mountains	Ventura	Ventura	4,867
Santa Ynez Peak triangulation station	Santa Ynez	Santa Barbara	4,292
Santiago Peak	Corona	Orange-Riverside	5,680
Saw Mill Peak	Chico	Butte	3,351
Sawtooth Peak	Kaweah	Tulare	12,340
Scarper Peak	San Mateo	San Mateo	1,952
Schnell Mountain	Weaverville	Shasta	4,572
Scott Bar Mountains	Seiad	Siskiyou	5,903
Scott Rock triangulation station	San Simeon	San Luis Obispo	660
Scraggy Mountain	Seiad	Siskiyou	7,030
Scylla Peak	Mount Goddard	Fresno	12,943
Sebrina Lake, water surface	do	Inyo	9,170
Semas Mountain	Bradley	Monterey	1,226
Sentinel Dome	Tehipite	Fresno	9,127
Sentinel Dome triangulation station	Yosemite Valley map	Mariposa	8,117
Sentinel Peak	Ballarat	Inyo	9,480
Sentinel Ridge	Tehipite	Fresno	9,648
Seven Gables	Mount Goddard	do	13,066
Shadequarter Mountain	Tehipite	Tulare	4,101
Sharktooth Peak	Kaiser	Fresno	11,630
Shasta Bally	Weaverville	Shasta	6,196
Shasta Mountain (C. & G. S.)	Shasta	Siskiyou	14,161
Sheep Mountain	Indio Special	Riverside	5,129
Sheep Mountain	Kaweah	Tulare	10,050
Sheep Mountain	Olancha	do	10,237
Sheep Peak	Mount Lyell [1]	Tuolumne	11,861
Sheep Ridge	Tehipite	Tulare	4,038
Shell Mountain	do	do	9,610
Shepherd Crest	Bridgeport	Tuolumne	12,001
Ship Mountain	Preston Peak	Del Norte	5,310
Shoemaker Bally	Weaverville	Shasta-Trinity	5,940
Shroyer Mountain	Petaluma	Marin	1,452

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Locality	Quadrangle	County	Elevation
			Feet
Shuteye Peak	Kaiser	Madera	8,358
Sidney Peak	Raudsburg	Kern	4,390
Sierra Buttes	Downieville	Sierra	8,615
Sierra Morena triangulation station	Santa Cruz	San Mateo	2,400
Sierra Peak	Corona	Orange-Riverside	3,045
Signal Peak	Colfax	Nevada	7,860
Silliman Mountain triangulation station	Tehipite	Tulare	11,188
Silver Lake, water surface	Mount Lyell [1]	Mono	7,221
Silver Mountain	Pomona	Los Angeles	3,413
Silver Peak	Cape San Martin	Monterey	3,580
Silver Peak	Kaiser	Fresno	11,883
Simi Peak	Triunfo Pass	Ventura	2,400
Sing Peak	Mount Lyell [1]	Madera	10,553
Sirretta Peak	Kernville	Tulare	9,956
Sister Elsie Peak triangulation station	Tujunga	Los Angeles	5,081
Sitton Peak	Elsinore	Riverside	3,254
Skinner Ridge	Point Sur	Monterey	3,658
Slick Rock	Pyramid Peak	Eldorado	7,285
Slide Hill	Arroyo Grande	San Luis Obispo	2,140
Slide Peak	Tehipite	Fresno	11,007
Slide Peak	Redlands	San Bernardino	7,807
Slover Mountain	San Bernardino	do	1,509
Smedberg Lake, water surface	Bridgeport	Tuolumne	9,223
Smith Mountain	Furnace Creek	Inyo	5,950
Smith Peak triangulation station	Yosemite [2]	Tuolumne	7,750
Snow Mountain	Truckee	Placer	8,048
Snow Peak	Dardanelles	Tuolumne	10,933
Snowball Mountain	Ventura	Santa Barbara	1,695
Snowy Peak	Tejon	Ventura	6,517
Soledad Mountain	La Jolla	San Diego	822
Solomon Mountain	Lompoc	Santa Barbara	1,338
Somes Mountain	Sawyer Bar	Siskiyou-Trinity	5,309
Sonora Pass	Dardanelles	Alpine-Mono-Tuolumne.	9,624
Sonora Peak	do	Alpine-Mono	11,429
South Fork Peak	Alturas	Lassen	7,406
South Mountain triangulation station	Santa Paula	Ventura	2,258
Spanish Mountain triangulation station	Tehipite	Fresno	10,044
Spanish Peak	Bidwell Bar	Plumas	7,047
Spellacy Hill	Buena Vista Lake	Kern	1,727
Spencer Mountain	Mount Goddard	Fresno	12,428
Split Mountain	Kernville	Kern	6,823
Split Mountain triangulation station	Bishop	Fresno-Inyo	14,051
Squaw Dome	Kaiser	Madera	7,806
Squaw Peak	Truckee	Placer	8,960
Stag Dome	Tehipite	Fresno	7,707
Stanford	Mount Whitney	Tulare	13,983
Stanford Point	Yosemite Valley map.	Mariposa	6,659
Stanislaus Peak	Dardanelles	Alpine	11,202
Stanton Peak	Bridgeport	Tuolumne	11,666
Starr King Mountain	Yosemite Valley map.	Mariposa	9,081
State Peak	Tehipite	Fresno	12,609
Steele Peak	Riverside	Riverside	2,528
Stevens Peak	Markleeville	Alpine	10,100
Stevenson Mountain	Kaiser	Fresno	6,552
Strawberry Hill	San Francisco	San Francisco	428
Strawberry Peak	Santa Ynez	Santa Barbara	6,546
Strawberry Peak triangulation station	Redlands	San Bernardino	6,150
Strawberry Peak triangulation station	Tujunga	Los Angeles	6,150
Striped Mountain	Mount Whitney	Fresno-Inyo	13,160
Sugarbowl Dome	Tehipite	Tulare	7,657
Sugarloaf	Bishop	Inyo	11,003
Sugarloaf	Elsinore	Orange	3,323
Sugarloaf	Placerville	Eldorado	1,279
Sugarloaf	Redding	Shasta	2,032
Sugarloaf	Shasta	Siskiyou	6,250
Sugar Loaf	San Benito	San Benito	2,835
Sugarloaf Butte	Tesla	Alameda	2,727
Sugarloaf Mountain	Indio Special	Riverside	4,780
Sugarloaf Mountain	Mount Hamilton	Santa Clara	2,780
Sugarloaf Mountain triangulation station	Weaverville	Shasta	3,905
Sugarloaf Peak	Cucamonga	San Bernardino	7,006
Sugarloaf Peak	Corona	Orange-Riverside	4,005
Suisun Hill	Carquinez	Solano	236
Sulphur Peak	Tejon	Ventura	4,551
Sulphur Springs Mountain	Carquinez	Solano	966
Sunol Ridge triangulation station	Pleasanton	Alameda	2,187
Sweeney Hill	Quien Sabe	Merced	2,175
Switchback Peak	Tehipite	Tulare	5,027

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Locality	Quadrangle	County	Elevation
T			
			Feet
Table Mountain	Bidwell Bar	Butte	6,217
Table Mountain	Mount Whitney	Tulare	13,646
Table Mountain	Palo Alto	Santa Clara	2,028
Table Mountain	Preston Peak	Del Norte	4,716
Tahoe, Lake, water surface	Markleeville-Pyramid Peak.	Eldorado, Calif., Douglas, Nev.	6,225
Tahquitz Peak	San Jacinto	Riverside	8,826
Tallac Mountain	Pyramid Peak	Eldorado	9,785
Tamalpais Mountain:			
West Peak	Tamalpais	Marin	2,604
East Peak	do	do	2,586
Taylorsville	Taylorsville	Plumas	3,542
Tecuya Mountain	Tejon	Kern	7,178
Tehachapi Mountains	Tejon	Kern	6,743
Tehipite Dome	Tehipite	Fresno	7,713
Telegraph Hill	San Francisco	San Francisco	296
Telegraph Peak	San Antonio	San Bernardino	9,008
Telescope Peak	Ballarat	Inyo	11,045
Tells Peak	Pyramid Peak	Eldorado	9,125
Templeton Mountain	Olancha	Tulare	9,948
Tenaya Lake, water surface	Mount Lyell [1]	Mariposa	8,150
Tepusquet Peak	Lompoc	Santa Barbara	3,235
Texas Hill	Sonora	Mariposa	3,318
Tharps Rock	Tehipite	Tulare	10,654
The Needles	Olancha	do	8,228
The Sphinx	Tehipite	Fresno	9,122
The Tombstone	Mount Goddard	do	10,003
Thimble Peak	Pyramid Peak	Alpine	9,870
Thomas Mountain	San Jacinto	Riverside	6,823
Thompson Hill	Placerville	Eldorado	2,021
Thompson Mountain	Mount Goddard	Fresno-Inyo	13,494
Thompson Peak	Honey Lake	Lassen-Plumas	7,752
Thompson Peak triangulation station	Sawyers Bar	Siskiyou-Trinity	8,936
Three Peaks	Point Reyes	Marin	1,169
Three Sisters	Riverside	Riverside	1,902
Three Sisters	Kaiser	Fresno	10,346
Thunder Mountain	Mount Whitney	Tulare	13,578
Tiburon Peninsula	San Francisco	San Francisco	780
Tierra Redonda Mountain triangulation station	Bradley	San Luis Obispo	2,051
Tiltill Mountain	Dardanelles	Tuolumne	8,951
Timber Knob	Mount Lyell [1]	Madera	9,972
Timber Mountain	Modoc Lava Bed	Modoc	5,142
Timosea Peak	Olancha	Inyo	8,657
Tin Mountain	Ballarat	do	8,900
Tinker Knob	Truckee	Placer	9,020
Tioga Pass	Mount Lyell [1]	Mono	9,950
Tiptop Mountain triangulation station	San Gorgonio	San Bernardino	7,607
Tivy Mountain	Dinuba	Fresno	2,835
Tom Martin Peak	Seiad	Siskiyou	6,975
Toms Head	Red Bluff	Tehama	6,775
Topotopo Bluff	Santa Paula	Ventura	6,351
Toro Peak	Indio Special	Riverside	8,705
Tower Peak	Dardanelles	Mono-Tuolumne	11,704
Tower Rock	Olancha	Tulare	8,512
Town Mountain	Redding	Shasta	4,339
Trabuco Peak	Elsinore	Orange-Riverside	4,578
Trail Peak	Olancha	Inyo-Tulare	11,622
Triple Divide Peak	Mount Lyell [1]	Madera	11,622
Triple Divide Peak	Tehipite	Tulare	12,651
Trumbull Peak	Yosemite [2]	Mariposa	4,911
Tucki Mountain	Amargosa Region	Inyo	6,705
Tulainyo Lake, water surface	Mount Whitney	Tulare	12,865
Tule Lake, water surface	Modoc Lava Bed	Modoc-Siskiyou	4,143
Tunemah Pass	Tehipite	Fresno	10,879
Tunemah Peak	do	do	11,879
Tunnabora Peak	Mount Whitney	Inyo-Tulare	13,593
Tuolumne Peak	Mount Lyell [1]	Tuolumne	10,884
Turrett Peak	Modoc Lava Bed	Modoc	6,239
Turrett Peak	Mount Goddard	Fresno	12,060
Twin Lakes, water surface	Bridgeport	Mono	7,076
Twin Lakes, water surface	Mount Whitney	Tulare	11,573
Twin Peak	La Jolla	San Diego	1,312
Twin Peak triangulation station	Truckee	Placer	8,924
Twin Peaks	Bridgeport	Mono-Tuolumne	12,314
Twin Peaks	Tehipite	Tulare	10,501
Twin Peaks	Quien Sabe	Merced	2,677
Twin Peaks triangulation station	Point Sur	Monterey	3,616
Tyndall Mountain	Mount Whitney	Inyo-Tulare	14,025

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Locality	Quadrangle	County	Elevation
			Feet
U			
Uncle Sam Mountain	Jamesburg	Monterey	4,781
Unicorn Peak	Mount Lyell [1]	Tuolumne	10,858
Union Point	Yosemite Valley map	Mariposa	6,314
University Peak	Mount Whitney	Inyo-Fresno	13,588
V			
Valencia Peak	Cayucos	San Luis Obispo	1,365
Valpe Ridge	Mount Hamilton	Santa Clara	3,612
Valpe Ridge	Tesla	Alameda	3,807
Veeder Mountain	Napa	Napa-Sonoma	2,670
Ventana Cone triangulation station	Jamesburg	Monterey	4,734
Verdugo Mountain	Los Angeles	Los Angeles	3,134
Vernon Lake, water surface	Dardanelles	Tuolumne	6,600
Victoria Peak	Bridgeport	Mono	11,121
Vision Mountain triangulation station	Point Reyes	Marin	1,336
Vogelsang Peak	Mount Lyell [1]	Mariposa	11,520
Volcanic Butte	Bridgeport	Mono	8,616
Volcanic Cone	Tehipite	Fresno	9,180
Volcanic Knob	Mount Goddard	do	11,153
Volunteer Peak	Bridgeport	Tuolumne	10,503
W			
Walker Lake, water surface	Mount Lyell [1]	Mono	7,935
Walker Mountain	Bridgeport	Mono	11,572
Wall Point	Mount Diablo	Contra Costa	1,608
Wallace Mountain	Mount Goddard	Fresno	13,701
Wallace Mountain	Tesla	Alameda-San Joaquin	3,127
Wanda Lake, water surface	Mount Goddard	Fresno	11,452
Ward Peak	Truckee	Placer	8,665
Warren Mountain	Mount Lyell [1]	Mono	12,342
Washington Column	Yosemite Valley map	Mariposa	5,917
Washington Peak	Preston Peak	Del Norte	2,932
Waterman Mountain	Rock Creek	Los Angeles	7,757
Waucoba Mountain triangulation station	Bishop	Inyo	11,121
Weaver Bally	Weaverville	Trinity	7,666
Webber Peak	Truckee	Sierra	8,102
West Vidette	Mount Whitney	Tulare	12,229
Wheeler Peak triangulation station	Bridgeport	Mono	11,646
Wheeler Ridge	Buena Vista Lake	Kern	2,121
Whiteacre Peak	Tejon	Ventura	5,100
Whitecliff Peak	Dardanelles	Alpine	10,800
White Dome	Kernville	Tulare	7,554
White Hill	Tamalpais	Marin	1,442
White Ledge Peak	Ventura	Ventura	4,615
White Mountain	Dardanelles	Alpine-Mono	11,321
White Mountain	Seiad	Siskiyou	6,480
White Mountain	Olancha	Tulare	8,739
White Rock	Santa Cruz	Santa Cruz	2,154
Whitney Pass	Mount Whitney	Inyo-Tulare	13,335
Whittier	Downey	Los Angeles	1,391
Whorl Mountain	Bridgeport	Tuolumne	12,050
Wild Yankee Hill	Bidwell Bar	Butte	2,726
Williams Butte	Mount Lyell [1]	Mono	8,438
Williams Hill triangulation station	Bryson	Monterey	2,801
Williamson Mountain	Mount Whitney	Inyo	14,384
Wilson Peak	Gilroy Hot Springs	Santa Clara	2,651
Winchell Mountain	Mount Goddard	Fresno-Inyo	13,749
Window Peak	Mount Whitney	Fresno	12,002
Windy Point	Mount Diablo	Contra Costa	2,158
Winnibulli Mountain	Redding	Shasta	2,705
Wittenberg Mountain	Point Reyes	Marin	1,403
Wolf Creek Mountain	Smartsville	Nevada	2,700
Wonoga Peak	Olancha	Inyo	10,387
Wood Mountain	Mount Lyell [1]	Mono	12,672
Woodson Mountain triangulation station	Ramona	San Diego	2,890
Woodworth Mountain	Mount Goddard	Fresno	12,214
Y			
Yosemite Point	Yosemite Valley map	Mariposa	6,935
Young, Mount	Mount Whitney	Tulare	13,187
Yountville	Napa	Napa	96
Z			
Zaca Peak	Lompoc	Santa Barbara	4,333
Zanja Peak	Redlands	San Bernardino	3,540
Zion, Mount	Mount Diablo	Contra Costa	1,637

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